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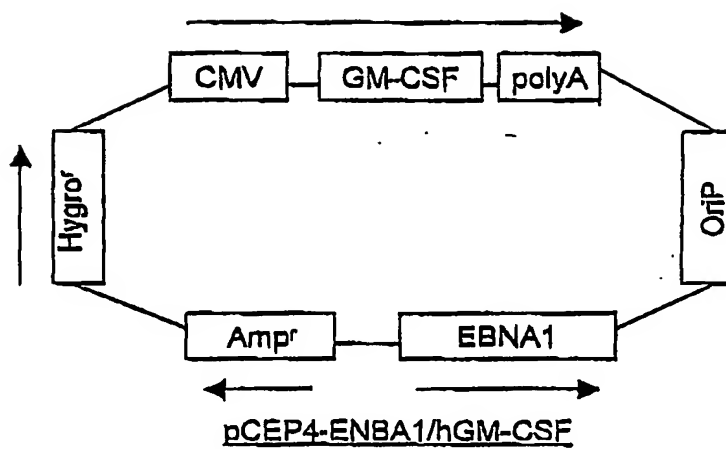


Figure 1

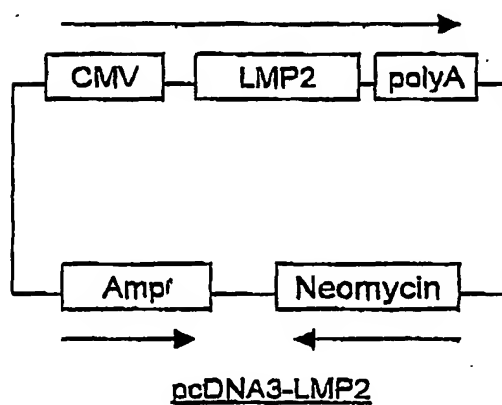


Figure 2

Homo sapiens interferon, alpha 1 (IFNA1), mRNA.

ACCESSION NM_024013

VERSION NM_024013.1 GI:13128949

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1 agaacctaga gcccaagggt cagagtcacc catctcagca agcccagaag tatctgcaat
   61 atctacgatg gccctgccct ttgctttact gatggctctg gtgggtgctca gctgcaagtc
  121 aagctgctct ctgggctgtg atctccctga gaccacacagc ctggataaca ggaggacctt
  181 gatgtccttg gcacaaatga gcagaatctc tccttcctcc tgtctgatgg acagacatga
  241 ctttggaatt ccccaggagg agtttgatgg caaccagttc cagaaggctc cagccatctc
  301 tgcctccat gagctgatcc agcagatctt caacctctt accacaaaag attcatctgc
  361 tgcttgggat gaggacctcc tagacaaatt ctgcaccgaa ctctaccagc agctgaatga
  421 ctggaagcc tgtgtgatgc aggaggagag ggtgggagaa actccctga tgaatgcgga
  481 ctccatcttg gctgtgaaga aatactccg aagaatcact ctctatctga cagagaagaa
  541 atacagccct tggcctggg aggtgtcag agcagaaatc atgagatccc tctctttatc
  601 aacaaacttg caagaaagat taaggaggaa ggaataacat ctggtccaac atgaaaacaa
  661 ttctattga ctcatacacc aggtcacgct tcatgaatt ctgtcattc aaagactctc
  721 accctgcta taactatgac catgctgata aactgattta tctatttaa tatttattta
  781 actattcata agatttaa atttttgtt catataacgt catgtgcacc ttacactgt
  841 ggtagtgta ataaaacatg ttcttatat ttactc
```

Homo sapiens interferon, alpha 2 (IFNA2), mRNA.

ACCESSION NM_000605

VERSION NM_000605.2 GI:11067750

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1 gagaacctgg agcctaagggt ttaggtcac ccattcaac cagctagca gcatctgcaa
   61 catctacaat ggccttgacc ttgctttac tgggtggcct cctgggtgctc agctgcaagt
  121 caagctgctc tgtgggctgt gatctgcctc aaaccacag cctgggtagc aggaggacct
  181 tgatgtcctt ggcacagatg aggagaatct ctctttctc ctgcttgaag gacagacatg
  241 actttggatt tcccaggag gagtttgga accagttcca aaaggctgaa accatccctg
  301 tcctccatga gatgatccag cagatcttca atctctcag caciaaggac tcactgtctg
  361 ctgggatga gacctccta gacaaattct aactgaact ctaccagcag ctgaatgacc
  421 tggaagcctg tgtgatacag ggggtggggg tgacagagac tccctgatg aaggaggact
  481 ccattctggc tgtgaggaaa tacttccaaa gaatcactct ctatctgaaa gagaagaaat
  541 acagcccttg tgctgggag gttgtcagag cagaaatcat gagatcttt tctttgcaa
  601 caaacttgca agaaagtta agaagtaagg aatgaaaact ggttaacat ggaaatgatt
  661 ttcatgatt cgtatgccag ctacctttt tatgatctgc cattcaaag actcatgtt
  721 ctgctatgac catgacacga tttaaactt ttcaaatgt ttaggagta ttaatcaaca
  781 ttgtattcag ctcttaaggc actagtccct tacagaggac catgctgact gatccattat
  841 ctatttaa atttttaaa tatttttat ttaactatt ataaaacaac ttattttgt
  901 tcattattat tcatgtgcac cttgacacag tggtaaatgt aataaatgt gttcttgta
```

Fig. 3

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961 ttggtaaatt ttatttggtg ttgttcattg aacttttgct atggaacttt tgtacttgtt
1021 tattctttaa aatgaaattc caagcctaatt tgtgcaacct gattacagaa taactggtac
1081 acttcatttg tccatcaata ttatatcaa gatataagta aaaataaact ttctgtaaac
1141 ca

Homo sapiens interferon, gamma (IFNG), mRNA.

ACCESSION NM_000619

VERSION NM_000619.1 GI:10835170

```
1 tgaagatcag ctattagaag agaaagatca gttaagtct ttggacctga tcagcttgat
61 acaagaacta ctgatticaa cttcttggc ttaattctct cggaaacgat gaaatataca
121 agttatatct tggctttica gctctgcatc gttttgggtt ccttggtctg ttactgccag
181 gacctatatg taaaagaagc agaaaacctt aagaaatatt ttaatgcagg tcattcagat
241 gtgacggata atggaactct ttcttaggc atttgaaga attggaaga ggagagtgcac
301 agaaaaataa tgcagagcca aattgtctcc ttctactca aacttttaa aaactttaa
361 gatgaccaga gcatccaaaa gagtgtggag accatcaagg aagacatgaa tgtcaagttt
421 ttcaatagca acaaaaagaa acgagatgac ttcgaaaagc tgactaatta ttggtaact
481 gactgaatg tccaacgcaa agcaatacat gaactcatcc aagtgtggc tgaactgtcg
541 ccagcagcta aaacagggaa gcgaaaaagg agtcagatgc tgttcaagg tcgaagagca
601 tcccagtaat ggtgtcctg cctgcaatat ttgaattta aatctaaatc tatttattaa
661 tatttaacat tatttatatg gggaatatat ttttagactc atcaatcaaa taagtattta
721 taatagcaac ttttgttaa tgaaaatgaa tatctattaa tatatgtatt attataatt
781 cctatatcct gtgactgtct cacttaatcc ttgttttct gactaattag gcaaggctat
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901 ggttgtgtgt ttatttcaat tgatgataca atgaacactt ataagtgaag tgatactatc
961 cagtactgc cggtttgaaa atatgcctgc aatctgagcc agtgctttaa tggcatgtca
1021 gacagaactt gaatgtgtca ggtgacctg atgaaaacat agcatctcag gagatttcat
1081 gccgtgtgct tccaaatatt gttgacaact gtgactgtac ccaaatggaa agtaactcat
1141 ttgttaaat tatcaatc taatatatat gaataaagtg taagttcaca act
```

Fig. 3 (cont.)

Human papilloma virus type 59, complete viral genome.

ACCESSION X77858

VERSION X77858.1 GI:557236

Rho,J., Roy-Burman,A., Kim,H., de Villiers,E.M., Matsukura,T. and Choe,J.

TITLE Nucleotide sequence and phylogenetic classification of human papillomavirus type 59

JOURNAL Virology 203 (1), 158-161 (1994)

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1 gttaagaccg aaaacgggtgc atataaaggt agtgaaaag aaaagggcaa cggcatggca
61 cgctttgagg atcctacaca acgaccatac aaactgcctg atttgagcac aacattgaat
121 attcctctgc atgatattcg catcaattgt gtgttttga aaggggaact gcaagaaaga
181 gaggtatttg aatttgcttt taatgactta ttatagigt atagagactg tacaccgtat
241 gcagcgtgtc tgaaatgcat tcatattat gcaagagtaa gagaattaag atattataga
301 gattccgtgt atggagaaac attagaggct gaaaccaaga caccgttaca tgagctgctg
361 atacgctgtt atagatgcct aaaacctcta tgcacaacag ataaattaa gcatataact
421 gaaaaaagaa gattccataa tatagctgga atatatagac gacagtgtcg tgggtgtcgg
481 acccgagcaa gacacctaag acagcaacga caagcgcgta gtgaaacact ggtgtaaaac
541 aatgcatgga ccaaaagcaa cactttgtga cattgttta gatttgaac caaaaatta
601 tgaggaagtt gaccttgtgt gctacgagca attacctgac tccgactccg agaatgaaaa
661 agatgaacca gatggagtta atcatcctt gctactagct agacgagctg aaccacagcg
721 tcacaacatt gtgtgtgtgt gttgtaagt taataatcaa ctacagctag tagtagaaac
781 ctgcgaagac ggattgcgag ccttacagca gctgttatg gacacactat cctttgtgtg
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901 agggacgggg tgcaatggat ggtttttgt gcaggcaata gtagataaaa aaacagggtga
961 caaaatttca gatgacgagg atgaaaatgc aacagataca ggttcagact tggtagattt
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1261 agacagcggc tatggctatt ctgaagtga aatgctcgag actcaggtaa ccgtaggaaa
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1381 cagcagtaac atggatgttg aaaacatagt tccaacatcc ccactaatc aattgttaca
1441 gttattacat agcaaaaata agaaagcagc tatgtatgca aaattaaag aattgtatgg
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1561 ggtaaccgcc attttgtg ttaatccaac ttagcagaa ggatttaaaa catlaatata
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1681 agcattatta agatataaat gtggaaaaaa tagaataaca gttgcaaaag gacttagcac
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1801 tgcagcacta tattgttaca gaacaggaat gtccaatatt agtgaagta taggggaaac
1861 gccgaatgg atacaagac taacaattat acaacatgga gttgatgata gcgtgttga
1921 cctgtcagaa atgatacaat gggcgttga taatgaccta acagatgaaa gtgatattgc

```

Fig. 3 (cont.)

1981 atatgaatat gcattaatag cagatagtaa tagtaacgcc gctgcatttt taaaaagcaa
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 2101 aaaaagacaa atgagtatgt cacagtggat aaaatggaga tgtgataaaa tagaagaggg
 2161 gggagattgg aaacccatag tacaattttt aagatatcaa ggagtagaat ttataacgtt
 2221 ttatgtgca ttaaaagatt ttttaaagg taccccaaaa agaaattgca ttgtgctgtg
 2281 tgggccagca aatacaggca agtcatactt tggaatgagc ctgctacatt tttaacaagg
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 2401 taaattagct atgctagacg atgcaacaga tagttgttgg acatatattg atacatatat
 2461 gcgaaatgct ttgatggca atcctataag ttagataga aagcataggc acctagtaca
 2521 aattaaatgt ccaccaatgc ttattacatc aaatacaaat ccagttacag ataacagggt
 2581 gccatattta aatagcagat taatggtatt taaattcca acaaaattgc catttgacaa
 2641 aaatagaaat ccagtatata caattaatga cagaaactgg aaatgtttt ttgaaaggac
 2701 gtggtgcaga ttagatttga acgaggaaga ggaagatgca gacagtatg gacacccttt
 2761 cgcagcgttt aagtgtgtta caggatcaaa tattagaaca ttatgaaaac gatagtaaag
 2821 acattaatga acacataaac tattggaac tgggtcgtat ggaaatgta atttatttg
 2881 cagcaagaga gaacaatata catacattaa accaccaggt ggtgccaacg ttttgggtg
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 3061 ttgtccattg ctcatttta aactcagttt gtgcaaact cttaacgcc atctgcagca
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 4201 gtgtgggtt ttttacattt ataataaac atggttccc atcgtgctgc tcgtcgtaaa
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Fig. 3 (cont.)

4321 gttattaata aagttgaagg tacaacttta gctgataaaa tattgcagtg gaccagccta
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 4441 tacatacctt taggggggcg tacaacact atagtagatg tatcgctgc taaaccacca
 4501 gtagttattg aacctgttg acctacagat ccatctatag ttacattagt tgaggattct
 4561 agtggtataa catctggagc cctgccccca acatttacag gtacttcagg atttgaaata
 4621 tctacctcta gtacaacaac accagctgtt ttggatataa cccaacctc ttctgtcaa
 4681 attagtagct ctagtattat aaatcctgca ttacagacc ctctgtcat tgaggttccc
 4741 caaacagggt aaatttctgg taatatatta attagtaacc ctacctctg tgcacatggc
 4801 tatgaagaaa ttcaatgca aacgtttgct acggaaggta ctggttggga acccattaggc
 4861 agtaccacca atccaacagt acgtcgttg gctggacctg gattgtacag tagggctaata
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 5161 caaattgggg ccggtgtaca ttttatcat gatataagcc ctataccaca tgctgaagat
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 6481 ccctcccca agtgggtctg tggttacttc tgattcaca ttatttaata aacctatg
 6541 gctgcacaag gctcagggt taaacaatgg tatatgttg cacaatcaat tgttttaac
 6601 agttgtagat actactcga gcaccaatct ttctgtgtg gcttctacta ctctctat

Fig. 3 (cont.)

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6721 ttgcagttt atattcaac tgtgtaaaat aacattaact acagaggtaa tgtcatacat
6781 tcataatatg aataccacta tttggagga ttggaattt gggtttacac cacctctac
6841 tgctagtta gtgacacat accgtttgt tcaatctgct gctgtaact gtcaaaagga
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6961 taaggaaagg tttctgcag atcttgatca gtttccttg ggacgtaaat tttattgca
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7621 aggtgcactc taacaatact tgcataactt tgggtggccc ctgttaata aaacagctt
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7741 gtgcaatcca agaatgtgtc tataatttat tgtaaaaaac atgactaagg ttttgtcat
7801 tgttaagcaa ccgaaaaagg tcgggcaagt acatgcacac tttctactta ttactttta
7861 caatcatagt aataaaaaag ggtgtaaccg aaaacg

Fig. 3 (cont.)

Human papilloma virus type 59, complete viral genome.

ACCESSION X77858

VERSION X77858.1 GI:557236

3908..4129 gene="ORF putative E5"

atg ataacccttg tatttggtg ttgtgttgt gttgcttgt gtgtgtgtg

3961 caatgtcccg ctctgcaat ctgtctatat gtgtgcatat acatgggtac tagtattgt

4021 gtattgtg gttatcacct cctcatatga gtgttttta ctatatatat tgtttttat

4081 aattccactg ttactactat atgcccacgc aatactgtcc atacaataa

55..537 gene="ORF putative E6"

atggca

61 cgctttgagg atcctacaca acgaccatac aaactgcctg atttgagcac aacattgaat

121 attcctctgc atgatattcg calcaattgt gtgttttgca aaggggaact gcaagaaaga

181 gaggtatttg aatttgcttt taatgactta ttatagtgt atagagactg tacaccgtat

241 gcagcgtgtc tgaatgcat ttcatllat gcaagagtaa gagaattaag atattataga

301 gattccgtgt atggagaaac attagaggct gaaaccaaga caccgttaca tgagctgctg

361 atacgctgtt atagatgcct aaaacctcta tgtccaacag ataaattaaa gcatataact

421 gaaaaaagaa gattccataa tatagctgga atatatacag gacagtgtcg tgggtgtcgg

481 acccgagcaa gacacctaag acagcaacga caagcgcgta gtgaaacact ggtgtaa

542..865 gene="ORF putative E7"

atgcatgga ccaaaagcaa cactttgtga cattgttta gatttgaac cacaaaatta

601 tgaggaagtt gacctgtgt gctacgagca attacctgac tccgactccg agaatgaaaa

661 agatgaacca gatggagtta atcatccttt gctactagct agacgagctg aaccacagcg

721 tcacaacatt gtgtgtgtgt gttgtaagt taataatcaa cttcagctag tagtagaaac

781 ctgcaagac ggattgagag ccttacagca gctgtttatg gacacactat cctttgtgtg

841 tcctttgtgt gcagcaaacc agtaa

Human papilloma virus type 13 DNA.

ACCESSION X62843 S43933

VERSION X62843.1 GI:60295

Van Ranst,M., Fuse,A., Fiten,P., Beuken,E., Pfister,H., Burk,R.D. and Opdenakker,G.

TITLE Human papillomavirus type 13 and pygmy chimpanzee papillomavirus type 1: comparison of the genome organizations

JOURNAL Virology 190 (2), 587-596 (1992)

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1 gtttctaaca atcttaagtt taaaaaatag gtgggaccga aaacggtttt aaccgaaaac
61 ggtgatatat aaaccagccc aaaaattgag caagcggggc ataatggaaa gtgcaaatgc
121 ctccacgcct gcaaaaacta tagaccagtt gtgcaaggag tgcaaccttt ctatgcacag
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241 tcagtataag agttatata tagtgtggcg aggacagttt ccatttgcgg ctgtgcatg
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481 tattaaatta aacagcagtt ggaaaggccg ctgtttcat tgctggcat catgcatgga
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841 cgatggcaga ggatacaggt actaataatg aggggacggg atgctcagga tggtttttag
901 tagaggctgt agtagaacga acaactgggc acaaaataic agatgatgag gatgaaacag
961 tgaagatag tgggttgat atggtggatt tcatagatga cagacctatt acacacaatt
1021 ccgtggaagc acaggcattg ttaaacgagc aggaggcgga tgctcattat gcggtctgtc
1081 aggacctaaa acgaaagtat ttaggcagtc catatgttag tccctagga catgttgaac
1141 agtcagtga ctgtgatata agtctcgtat tggacgctat aaaattaagt agaaattcta
1201 aaaaagtaaa gcgacggctg ttcaatcaa gggaaataac ggacagtga tatggctatt
1261 ctgaagtga agctgaaacg caggtagaga gaaatggcga accggaaaat gattgtggg
1321 gtggtggaca cggaaggac aaagaggggg agggacaggt gcacacggaa gtgcacacag
1381 gcagccagat agaagagcac acagggacca cgcggtgtt agaactcctt aaatgtaagg
1441 atgtaagggc tacattgtat ggtaagttta aagactgtta tgggttatca ttacagatt
1501 taattagacc atttaaaagt gataaaacaa catgtgggga ctgggtggti gcagcatttg
1561 gtatacatca tagtgtatca gaggcatttg aaaagttaat gcagccatta acaacatata
1621 tgcataatca atggcttaca aatgcatggg ggatggtatt gttagtatta ataagattta
1681 aagtaaataa aagtagatgc acagtggcgc gaacactggc aaccttctt aatattcctg
1741 aggaccacat gtaattgaa cctcccaaaa tacaagcag tgtggcagca ttatactggt
1801 ttagaacagg tatttctaata gctagtatag taactggtga aacaccagaa tggataaaaa
1861 ggcaacaat tgtagagcat ggactgcag ataataatt taaattaact gaaatggtgc

```

Fig. 3 (cont.)

1921 agtgggcata tgataatgat tttgtgatg aaagcgaaat agcatttgaa tatgcacaac
1981 gaggagattt tgattcaaat gccagggcat ttttaaatag taattgtcag gcaaaatag
2041 taaaagattg tgacaacatg tgcaagcatt ataaaaatgc agaaatgaaa aaaatgtcta
2101 tgaacaatg gataacatat agaagtaaaa aaatagagga agcaggaaat tggaaaccaa
2161 tagtacaatt ttaaggcat caaaatatag aatttatcc attttaagt aaattaaaat
2221 tgtggcttca tggcacgcca aagaaaaact gtattgcaat agtggggcca ccagatacag
2281 gcaaatcatg ttttgcag agcttaatta agttttagg gggcacagta attagtatg
2341 taaattcaag tagccatttt tggctgcagc cattatgtaa tgcaaaggta gcttgctag
2401 atgatgcaac gcagtcagc tgggtatata tggacacata catgagaaat ttattagatg
2461 gcaatccaat gagcattgat agaaaacata agtctttagc attaataaaa tgcgcgcat
2521 tattagtaac atctaagtga gacattacca aagatgacaa atataaatat ttgtatagta
2581 gagtaacaac acttacattt ccaaatccat tccctttga cagaaatggg aatgcagtat
2641 atgagttgic tgatgcaaac tggaaatgtt ttttacaag attgtcagca agcctagata
2701 tacaggactc tggagcagag gacgatggag acaatagcca agcatttaga tgcgtgccag
2761 gaacagttgt tagaactgta tgaagaaaat agtaatgaac ttaaaaaaca tataacaat
2821 tggaaatgct taaggtaga aaggttactc ttacacaaag cagcccaat gggcctaagc
2881 cacattggat tacaagtgtt gccaccattg acagtatcac aagctaaggg acatgaggca
2941 attgaaatgc aaatgacttt agagacatta ctgagtgctg agtttggtat ggaacctagg
3001 actttacaag atacaagtgc tgaaatgtgg ctaacacccc caaacgctg ttttaagaaa
3061 cagggacaaa ctgtggaagt aaaatatgac tgtaatacag acaatagaat ggattatgtg
3121 tcgtggacat acatatatgt gttgacaca gataaatgga caaaggtaga aggaatgga
3181 gattataaag ggtgtacta catacatgga aattgaaaa catattattt agagtttgaa
3241 aaggaggcta aaaaatatgg ggaaacgtta caatgggaag tatgtattgg cagcacagtc
3301 atatgtctc ctgcatctgt atctagtact gtacaagaag tatccattgc tgggcctgct
3361 tcatactcca ccaccacctc cacacaggcc tccaccgcag tgcctgcag cgccctggaa
3421 gaatgtgtgc aagcgccgcc ttgtaaacga caacgaggac ctacacgtcc cattggaaac
3481 cccagaaca cacaagcat tgtgtgtgc acagactacg acaccctgga cagtgcaaac
3541 aacaacatca acgttaacca ttacaacaat aacaaaggac gggacaacag ttactgtgca
3601 gctacaccta tagttcaatt acaaggtagc tctaattgtc taaagtgtt tcgatataga
3661 ttacatgaaa aatataaaga ttatttttg ttagcatcat ctacatggca ttggaccgcc
3721 cctaataatt cacaaaaaca tgcactggta acctaacct atgtaaatga acaacaaaga
3781 caagactttt taaaaactgt aaaaatacct ccaaccataa cacataaact aggtttatg
3841 tcattgcaat tgtataaca gcataatgt tatgtaaata ttgtgtgtg gtgtgtatat
3901 attgtaaatg gaatttatac ctgtggatgt tagtacacag gcaaccagca agtcattact
3961 gccacttga attgcactta cagtgtgtgt agttagcatt ataacaatat tgtgcatatc
4021 agagtcttg gtgtacacaa acgttttagt actaacatta attttatag tacttttg
4081 gctttacta acaactccct tgcaattcta ttactaacc ctgtctctt gctttctcc
4141 tgcgttgtgt gtacaccaat atattttaca aacacaagaa taactatata caatgttaac
4201 ctgtactttt gatgatggtg acacatggtt gctattatgg ttaatttat cattattgt

Fig. 3 (cont.)

4261 agccattcta gggttactgt tgctgtatat aagaactgga catatgcatt gccagtgtg
 4321 gagtaaataa gtggttttat atttgtgtg taticattta attatggcac atagtagggc
 4381 tcgcagacgc aaacgcgctt cagctacaca actatatcaa acttgtaagg ctctggaac
 4441 atgtcctcct gatgttatac caaagggtga acaaaacact ctgcagata aaatattaaa
 4501 gtggggcagt ttaggagtat ttttggggg gcttggcatt ggcacaggct ctggtactgg
 4561 cggtaggact ggctatgtac cagtaggata caccacacgc cctgccatat caactggggc
 4621 tactgcacgt cctcctattg ttgtgatac tgttgggcct acagaccctt ctattgtatc
 4681 tttgtagag gaatcagcta ttattaattc tggagtacct gacccttgc ctccgttca
 4741 tgggggtttt gaaatcacca catctcaatc agccactcca gcaatattgg atgtgtctgt
 4801 tacaacacaa aacactacgt ccacaagtat atttagaaat cctgtttttt cagaaccttc
 4861 tattacacaa tctcaacctt ctattgaaag tgggtcacac gtgtttatat cgccatctac
 4921 tatttcccct cattctacag aagacattcc tttagatata ttattgtat ctctctcaga
 4981 tagtaatcct gcataagca cccctgttcc agcaactgtt gcacgtccac gtctaggcct
 5041 ttacagtagg gccttacatc aagtacaggt tactgatcct gcctttttat cgtcgcccca
 5101 acgccttata acccttgata accctacata tgaagggtgaa gatataagtt tgcagttgc
 5161 acacaatacc atcatgaac cccctgatga ggcatttatg gatattataa gactacatag
 5221 gccagccata acatcacggc gtggtcttgt taggtttagt agaattggtc agagggggtc
 5281 tatgtatact cgaagcggca agcatatagg tggaagggtc catttcttta aggatatttc
 5341 tcctatatct gcagctgcag aagaaataga attacacccc ctgtggctg ctgcacagga
 5401 tcacagtggg ttgttgata ttatgcaga acctgaccct gaccctgtgg ctgtaaacac
 5461 ctctgggtca ttgtctctg cctccacacc attgcacaa tcttcttgt ctccgcccc
 5521 atggggtaat actactgttc ctcttcact accagggtgat atatttatac agcctgttc
 5581 tgacataaca tcccaactg cactacagt aacgccttat aatcctgta cgcctgctt
 5641 acctacaggi cctgttttta ttactgcttc tggattttat ttatatcta catggtattt
 5701 tacacgcaaa cgccgtaaac gtgtttcctt gtttttaca gatgtggcgg cctagtgcga
 5761 acaaactata tggcctcct cccgcccctg tatcaaaagt aattactacg gatgcctatg
 5821 ttacacgtac caacatattt tatcatgcta gcagttctag actacttga gtgggaaatc
 5881 cttattttcc tattaagaaa caaaacaaaa ctgtgtccc taaggatatct ggttatcagt
 5941 ttaggggtatt taaagttgta ttacctgacc ctaataaatt tgccctgcct gacacatcta
 6001 tatttgactc aactagtcaa cgcttagtgt gggcctgiac aggtttagag gttgtaggg
 6061 gtcaaccctt aggtgttgtt attagtggc atccattatt aaataaatat gatgatgtgg
 6121 aaaattctgc aagttatgct gccaatcctg gtcaggataa taggggtaat gtggccatgg
 6181 actataaaca aacacagtta tgttagtggt gctgtgcacc tcttttaggt gaacattggg
 6241 gacagggcaa gcaatgtact ggtgtaaatg tacaacctgg agattgccct ctttagaat
 6301 taattagtag tgtaattcag gatggtgaca tgggtgatac aggatttga gccatgaatt
 6361 ttgcggaatt gcaatctaataaatctgatg tgccactaga catatgcacg tccacatgca
 6421 aatatactga ctatttaca atggctgcgg atccttatgg agacagatta tttttatc
 6481 tgcgaaagga acaaatgttt gcaaggcatt tcttaacag ggcaggctct gttggtgaac
 6541 aaatcccagc agaattatat gtaagggtga gtaatacact ttctaatagt atttactata

Fig. 3 (cont.)

6601 atactcccag tggctctctt gtgtctctg aggccagtt gtttaataaa ccttattgt
6661 tacaaaaggc ccaggacac aataatggta tatgttggg caatcactg ttgttactg
6721 tagttgatac tacacgcagt actaacatga ctgtgtgtgc agccactaca tcatctctt
6781 cagacacata taaggccaca gaatataaac agtacatgcg acatgtagaa gaatttgatt
6841 tacaatttat ttccaattg tgcactatta aattaactgc agaggttatg tcatatattc
6901 atactatgaa tcctacaatt ctagaagact ggaactttgg gctatctccc cctcctaag
6961 gaacattaga agacacatat agatatgtac aatctcaggc cataacgtgt caaaagccta
7021 cacttgataa agaaaaacag gatccgtatg cgggtcttag ttttgggag gtaaatctta
7081 aggaaaagtt ttctagttaa ctgatcagt atccccttg cagaaagttt ttattacaaa
7141 caggcgttca gtctaggctc cctattcgtg taggtaggaa acgtgctgca tclacatcta
7201 ctgccacacc tactacacgt aaaaaagcta aaaggaaata atagtttgtt tatgatttg
7261 tatgtatgtc acgtttgtt gtactgtatg tatgttgtgt actgtatgtg taatgttga
7321 tgtatgtgca tgtacttat taaagaatgt gtgtgtgtgt ttgtatgcaa taaatcta
7381 ctgtggtgtc ctgtccacc ctatgagtaa gtggtatgt gtgtctcgtg tgggttttg
7441 tatactatac tataacatta gtgcaacat ttgtaactt ttctacatt ttacgtctcc
7501 atattaagt caaccgattt cgggtgctat tgttctgcg accgattgt tgcagcacgc
7561 tgtttatata atcttaccta ccgcctgcc aaattatcca ccgcttgcca aaatcaccca
7621 cacacctggc gtgtctaggg cgcggttata tataattact aaatcttact aatcttcta
7681 tcaactatit tacctttata acaatactt tgctttcaa gtacatttt gtacttacta
7741 gccaatgcct gaaaggttt ttggctacca gcactacatt ttgtacagt taatgttaca
7801 tgtataaaat gagtaaccta aggtcacaca cctgcaaacc ggtatcggtt aaaacacacc
7861 ctctatagtt ccttataatt

Fig. 3 (cont.)

Human papilloma virus type 13 DNA.

ACCESSION X62843 S43933

VERSION X62843.1 GI:60295

3908..4183 gene="E5"

atg gaatttatac ctgtggatgt tagtacacag gcaaccagca agtcattact

3961 gccacttgta attgcactta cagtgtgigt agttagcatt ataacaatat tgtgcatatc

4021 agagttcttg gtgtacacaa acgttttagt actaacatta attttataig tacttttg

4081 gcttttacta acaactccct tgcaattcta ttactaacc ctgtctcttt gctttctcc

4141 tgcgttgtgt gtacaccaat atattttaca aacacaagaa taa

104..556 gene="E6"

atggaaa gtgcaaatgc

121 ctccacgcct gcaaaaacta tagaccagtt gtgcaaggag tgcaaccttt ctatgcacag

181 ctgcaaat ctatgcgtgt tctgcaggaa aacctgtcc acggcagagg ttatgcatt

241 tcagtataag agttatata tagtgtggcg aggacagttt ccatttgcgg cttgtgcatg

301 ctgcttagaa atacaaggaa agattaacca gtttaggcat ttgacttcg cgggatttgc

361 tgtaacagtt gaagaagaca caaagcagtc aattttggat gtgctaattc gctgctattt

421 atgccacaaa ccattgtgtg aagtggagaa actaagacat attttcaga aggcacgatt

481 tattaatta aacagcagtt ggaaaggccg ctgtttcat tgcgtgcat catgcatgga

541 aaatataccta ccttaa

532..837 gene="E7"

atgcatgga

541 aaatataccta ccttaaaga cattgtttta gagctgactc ctgacctgt aggtctacat

601 tgcaatgagc aattagacag ctgagaagac gaggtggacg aacaagccac gcaagccacg

661 caagccacgc aacatagcac actattacaa tgctacaaa tactaacgtc ctgtagtaaa

721 tgtgttagca acgtccggct ggtgggtggag tgtacaggac ctgacattca cgacctacac

781 gacctactgc tgggcacgct gaatatagtg tgcccttgt gtgcacaaa aagctaa

Homo sapiens erythropoietin (EPO), mRNA.

ACCESSION NM_000799

VERSION NM_000799.1 GI:4503588

```

1 ccggagccg gaccggggcc accgcgccc cctgtctcg acaccgcgc cctggacag
  61 ccgccccttc ctccaggccc gtggggctgg cctgcaccg ccgagcttc cgggatgagg
 121 gcccccggtg tggcacccg gcgcgcccc ggctgctgag ggaccccggc caggcgcgga
 181 gatgggggtg cacgaatgc ctgcctggct gtggcttcct ctgtccctgc tctgctccc
 241 tctgggcctc ccagtcttg gcgccccacc acgcctcctc tgtgacagcc gagtctgga
 301 gaggtacctc ttggaggcca aggaggccga gaatatcac acgggctgtg ctgaacactg
 361 cagcttgaat gagaatatca ctgtccaga caccaaagt aattctatg cctggaagag
 421 gatggaggtc gggcagcagg ccgtagaagt ctggcagggc ctggccctgc tctcggaagc
 481 tctcctgcgg ggccaggccc tgttggtcaa ctctcccag ccgtgggagc cctgcagct
 541 gcatgtggat aaagccgtca gtggccttc cagcctcacc actctgcttc gggctctgcg
 601 agcccagaag gaagccatct cccctccaga tggggcctca gctgtccac tccgaacaat
 661 cactgctgac acttccgca aactctccg agtctactcc aatttctcc ggggaaagct
 721 gaagctgtac acaggggagg cctgcaggac aggggacaga tgaccagggtg tgtccacctg
 781 ggcatatcca ccacctccct caccaacatt gcttgtgcca caccctcccc cgccactcct
 841 gaaccccgtc gaggggctct cagctcagcg ccagcctgtc ccatggacac tccagtgcc
 901 gcaatgacat ctacggggcc agaggaactg tccagagagc aactctgaga tctaaggatg
 961 tcacagggcc aactgaggg ccagagcag gaagcatcca gagagcagct taaactcag
1021 ggacagagcc atgctgggaa gacgcctgag ctactcggc accctgcaaa atttgatgcc
1081 aggacacgct ttggaggcga ttacctgtt ttcgcacct ccatcaggga caggatgacc
1141 tggagaactt aggtggcaag ctgtgacttc tccaggctc acgggcatgg gcactccctt
1201 ggtggcaaga gccccctga caccgggggt gtgggaacca tgaagacagg atgggggctg
1261 gcctctggct ccatgggggt ccaagttttg tgtattcttc aacctattg acaagaactg
1321 aaaccaccaa aaaaaaaaaa aa

```

Mus musculus FMS-like tyrosine kinase 3 ligand (Flt3l), mRNA.

ACCESSION NM_013520

VERSION NM_013520.2 GI:31982427

```

1 gaattcgcg cgcgctgac attctgggga cgtcggtcgg ggttctaga agaggagatg
  61 actttcaca gtcactgagg ctctgcagg aagcctgggg gagcaggagg cggaaaccga
 121 cccacatcaa gggcggcagg gccgggcggc ggggtacagg ggttgggggg gaaggggctg
 181 cagggtatga gcccgagacc tgccctctg tcaattcaa gaacctgtca caggcatgag
 241 ggggtccccg cagagatgac agtgctggcg ccagcctgga gcccaaattc ctccctgtg
 301 ctgctgttgc tctgtctgag tcttgctg cgggggacac ctgactgtta cttcagccac
 361 agtcccatct cctccaactt caaagtgaag ttagagagt tgactgacca cctgtctaaa
 421 gattaccagg tcactgtggc cgtcaatctt caggacgaga agcactgcaa ggcctgtgg
 481 agcctcttc tagcccagcg ctggatagag caactgaaga ctgtggcagg gtctaagatg

```

Fig. 3 (cont.)

541 caaacgcttc tggaggacgt caacaccgag atacattttg tcacctcatg taccttcag
 601 cccctaccag aatgtctgcg attcgtccag accaacaatct cccacctct gaaggacacc
 661 tgcacacagc tgcttggtct gaagccctgt atcggaagg cctgccagaa ttctctcgg
 721 tgcctggagg tgcagtcca gccggactcc tccacctgc tgcaccaag gattccata
 781 gccctagaag ccacggagct ccagagcct cggcccaggc agctgttct cctgctgctg
 841 ctgctgctgc ctctcacact ggtgctgctg gcagccgct ggggcctcg ctggcaaagg
 901 gcaagaagga ggggggagct ccacctggg gtgcccctcc cctccatcc ctaggatgg
 961 agcctgtgc atcgtgact cagccagggt ctatctcga tgaggctca atatgtgcc
 1021 caaactgact ttgaaaacct cgatgcacct tctgcccc caaactcca aacagctggg
 1081 ctacgggca tgcataatac aacaaggct tctttctc ttcttggtg ctagattgg
 1141 gaacaaaac aa

Homo sapiens macrophage colony-stimulating factor (M-CSF1) cDNA to
mRNA, complete cds.

ACCESSION M27087

VERSION M27087.1 GI:508985

1 agccgctctc cgcattccag gacagcgggt cggccctcgg ccggggcgcc cactccgag
 61 caccagcga gcgagcgagc gagcgagggc ggccgacgcg ccgggcccgg accagctgc
 121 ccgtatgacc gcgcccggcg ccgcccggcg ctgccctcc acgacatggc tgggtccct
 181 gctgtgttg gtctgtctcc tggcgagcag gattatcacc gaggagggtg cggagtactg
 241 tagccacatg attgggagtg gacacctgca gtctctgcag cggctgattg acagtcatg
 301 ggagacctcg tgccaaatta cattgagtt ttagaccag gaacagtga aagatccagt
 361 gtgtacctt aagaaggcat ttctctggt acaagacata atggaggaca ccatgcgtt
 421 cagagataac accccaatg ccatgccat tgtgcagctg caggaaactct cttgaggct
 481 gaagagctgc ttaccaagg attatgaaga gcatgacaag gcctgcgtcc gaactttcta
 541 tgagacacct ctccagtgc tggagaagg caagaatgc ttaataaaa caaagaatct
 601 cctgacaag gactggaata ttctcagca gaactgcaac aacagcttg ctgaatgctc
 661 cagccaagat gtggtgacca agcctgattg caactgcctg taccctaaag ccatccctag
 721 cagtgaccg gcctctgtct cccctcatca gcccctgcc cctccatgg cccctgtggc
 781 tggcttgacc tgggaggact ctgagggaac tgagggcagc tcctcttgc ctggtgagca
 841 gcccctgcac acagtggatc caggcagtc caagcagcg ccaccagga gcacctgcca
 901 gagcttgag ccgcccagaga cccagttgt caaggacagc accatcggtg gctcaccaca
 961 gcctgcccc tctgtgggg cctcaacct cgggatggag gatattctg actctgcaat
 1021 gggcactaat tgggtcccag aagaagcctc tggagaggcc agtgagattc ccgtaccca
 1081 agggacagag cttccccct ccaggccagg agggggcagc atgcagacag agcccgccag
 1141 accagcaac ttctctcag catctctcc actccctgca tcagcaaagg gccaaagcc
 1201 ggcatatga actggtaccg cctgcccag ggtgggccc gtgaggcca ctggccagga
 1261 ctggaatcac acccccaga agacagacca tcatctgcc ctgctcagag acccccggga
 1321 gccaggctct ccaggatct catcaccgc ccccagggc ctgagcaacc cctccacct

Fig. 3 (cont.)

1381 ctctgctcag ccacagcttt ccagaagcca ctctcgggc agcgtgctgc ccctgggga
 1441 gctggagggc aggaggagca ccagggatcg gaggagcccc gcagagccag aaggaggacc
 1501 agcaagtga ggggcagcca gggccctgcc ccgttttaac tccgttcctt tgactgacac
 1561 acatgagagg cagtcaggagg gatcctccag cccgcagctc caggagtctg tctccacct
 1621 gctgggtccc agtgatcatcc tggctctgct ggccgtcgga ggcctctgt tctacagggtg
 1681 gaggcggcgg agccatcaag agcctcagag agcggattct ccctgggagc aaccagaggg
 1741 cagccccctc actcaggatg acagacaggt ggaactgcca gtgtagaggg aattctaaga
 1801 cccctcacca tcttgacac tctcgtttgt caatgtccct ctgaaaatgt gacgcccagc
 1861 cccggacaca gtactccaga tgtgtctga ccagtcaga gagagtacag tgggactgtt
 1921 accttcttg atatggacag tattcttcta ttgtgcaga ttaagattgc attagtttt
 1981 ttcttaacaa ctgcatcata ctgtgtcat atgttgagcc tgtgtctat aaaacccta
 2041 gtccatttc ccataaactt ctgtcaagcc agaccatctc taccctgtac ttggacaact
 2101 taacttttt aaccaaagt cagtttatgt tcaccttgt taaagccacc ttgtggttc
 2161 tgcccatcac ctgaacctac tgaagttgtg tgaatccta attctgtcat ctccgtagcc
 2221 ctcccagttg tgccctctgc acattgatga gtgcctgctg ttgtcttgc ccatgtgtt
 2281 gatgtagctg tgacctatt gtctctcacc cctgcccccc gccaacccca gctggccac
 2341 ctcttcccc tcccaccaa gccacagcc agcccatcag gaagcctcc tggcttctc
 2401 acaacctct gactgtctt ttagtcatgc cccctgctct ttgtattg gctaatagta
 2461 tatcaattg cactt

cDNA encoding Granulocyte-Colony stimulating factor.

ACCESSION E08531

VERSION E08531.1 GI:2176646

1 cggagcctgc agcccagccc caccagacc catggctgga cctgccaccc agagcccat
 61 gaagctgatg gccctgcagc tgctgctgtg gcacagtga ctctggacag tgcaggaagc
 121 cccccctg ggcctgcca gctccctgcc ccagagcttc ctgtcaagt gcttagagca
 181 agtgaggaag atccagggcg atggcgcagc gctccaggag aagctggtga gtgagtgtgc
 241 cacctacaag ctgtgccacc ccgaggagct ggtgctgctc ggacactctc tgggcatccc
 301 ctgggctccc ctgagcagct gcccagcca ggcctgcag ctggcaggct gcttgagcca
 361 actccatagc ggcctttcc tctaccaggg gctcctgcag gccctggaag ggatctccc
 421 cgagtgggt cccacctgg acacactgca gctggacgtc gccgactttg ccaccacat
 481 ctggcagcag atggaagaac tgggaatggc cctgccccg cagcccaccc aggggtgcat
 541 gccggccttc gcctctgctt tccagcgccg ggcaggaggg gtcttggtg cctccatct
 601 gcagagcttc ctggagggtg cgtaccgct tctacgccac ctgcccagc cctgagccaa
 661 gccctcccca tccatgtat ttatctctat ttaatattha tgtctattta agcctcatat
 721 taaagacag ggaagagcag aacggagccc caggcctctg tgtcttccc tgcatctc
 781 agtttattc tctgcctgt agcagtgaga aaaagctct gtctcccat cccctggact
 841 gggaggtaga taggtaaata ccaagtattt attactatga ctgctccca gccctggctc
 901 tgcaatgggc actgggatga gccgctgta gccctggctc ctgagggtcc ccacctggga

Fig. 3 (cont.)

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961 cccttgagag tatcaggtct cccacgtggg agacaagaaa tccctgttta atattaaac
 1021 agcagtggtc cccatctggg tcttgccacc cctcactctg gcctcagccg actgcacagc
 1081 ggccccgtca tccccttggc tgtgaggccc ctggacaagc agaggtggcc agagctggga
 1141 ggcatggccc tgggtgccc cgaatttgct ggggaatctc gttttcttc ttaagacttt
 1201 tgggacatgg ttgactccc gaacatcacc gacgcgtctc ctgttttct ggggtggcctc
 1261 gggacacctg cctgcccccc acgaggggtca ggactgtgac tcttttagg gccaggcagg
 1321 tgcttgaca ttgccttgc tggacgggga ctggggatgt gggagggagc agacaggagg
 1381 aatcatgtca ggcctgtgtg tgaaggaag ctccactgtc accctccacc tctcaccccc
 1441 ccactacca gtgtccctc cactgtcaca ttgtaactga acttcaggat aataaagtg
 1501 ttgctccaa aaaaaaaaaa aaaaaaaaaa a

Granulocyte-Colony stimulating factor gene.

ACCESSION E08530

VERSION E08530.1 GI:2176645

1 ctgccgctc caggcgtcta tcagcggctc agcctttgtt cagctgttct gttaaacaac
 61 tctggggcca ttcaggcctg ggtggggcag cgggaggaag ggagttgag gggggcaagg
 121 cgacgtcaaa ggaggatcag agattccaca attcacaaa actttcgcaa acagctttt
 181 gtccaaccc cctgcattg tcttgacac caaatttgca taaatcctgg gaagtatta
 241 ctaagcctta gtcgtggccc caggtaat tctccaggc ctccatgggg ttatgtataa
 301 agggccccct agagctgggc cccaaaacag cccggagcct gcagcccagc cccaccaga
 361 cccatggctg gacctgccac ccagagcccc atgaagctga tgggtgagtg tcttgccca
 421 ggatgggaga gccgcctgcc ctggcatggg agggaggctg gtgtgacaga ggggtggg
 481 atccccgtc tgggaatggg gattaaaggc acccagctc cccgagaggg cctcaggtg
 541 tagggaacag catgtctctg gagccgctc tgcctccagc cctgcagctg ctgctgtggc
 601 acagtgcact ctggacagtg caggaagcca cccccctgg cctgccagc tccctgccc
 661 agagcttct gctcaagtgc ttagagcaag tgaggaagat ccagggcgat ggcgagcgc
 721 tccaggagaa gctgtgagt gaggtgggtg agagggctgt ggagggaagc ccggtgggga
 781 gagctaaggg ggtggaact gcagggccaa catcctctg aaggacatg ggagaatatt
 841 aggagcagtg gagctgggga aggtgggaa gggactggg gaggaggacc ttggtgggga
 901 cagtgtcgg gagggctggc tggatggga gtggaggcat cacattcagg agaaagggca
 961 agggccccctg tgagatcaga gagtgggggt gcagggcaga gaggaactga acagcctggc
 1021 aggacatgga gggaggggaa agaccagaga gtcggggagg acccggaag gagcggcgac
 1081 ccggccacgg cgagtctcac tcagcatct tccatcccc gttgtccacc tacaagctgt
 1141 gccaccccga ggagctggtg ctgctggac actctctgg catcccctg gctcccctga
 1201 gcagctgcc cagccaggcc ctgcagctg tgagtgtcag gaaaggataa ggctaagag
 1261 gagggggaag gagaggagga acacccatgg gctccccat gtctccaggt tccaagctg
 1321 gggcctgacg tatctcaggc agcaccctt aactctccg ctctgtctca caggcaggct
 1381 gcttgagcca actccatagc ggcctttcc tctaccagg gctcctgcag gccctggaag
 1441 ggatctccc cgagtgggt cccacctgg acacactga gctggacgtc gccgacttg

Fig. 3 (cont.)

1501 ccaccacat ctggcagcag gtgagccttg ttgggcaagg ttgccaaggt cgtgctggca
 1561 ttctgggcac cacagccggg cctgtgtatg ggccctgtcc atgtgtcag cccccagcat
 1621 ttctcattt gtaataacgc ccactcagaa gggcccaacc actgatcaca gctttcccc
 1681 acagatggaa gaactgggaa tggccctgc cctgcagccc acccaggggt ccatgccggc
 1741 ctgcctct gcttccagc gccgggcagg aggggtcctg gttgcctccc atctgcagag
 1801 ctcttgag gtgtcgtacc gcgttctacg ccaccttgcc cagccctgag ccaagccctc
 1861 cccatcccat gtatttatct ctatttaata ttatgtcta ttaagcctc atatttaaag
 1921 acaggaaga gcagaacgga gcccagggc tctgtgctt tccctgcatt tctgagttc
 1981 attctctgc ctgtagcagt gagaaaaagc tctgtctc ccatccctg gactgggagg
 2041 tagataggta aataccaagt atttattact atgactgctc ccagccctg gctctgcaat
 2101 gggcactggg atgagccgct gtgagccctt ggtcctgagg gtcccacct gggaccctg
 2161 agagtatcag gtctccacg tgggagacaa gaaatccctg ttaatatatt aaacagcagt
 2221 gttcccatc tgggtcctg caccctcac tctggcctca gccgactgca cagcggcccc
 2281 tgcattccct tggctgtgag gccctggac aagcagaggt ggccagagct gggaggcatg
 2341 gccctgggt cccacgaatt tctggggaa tctgtttt ctcttaaga ctttgggac
 2401 atggttgac tccgaacat caccgacgtg tctctgtt ttctgggtg cctcgggaca
 2461 cctgccctgc cccacgagg gtcaggactg tgactcttt tagggccagg cagggtcctg
 2521 gacattgcc ttgtggatg gggactggg atgtgggagg gagcagacag gaggaatcat
 2581 gtcaggcctg tgtgtgaaag gaagctccac tgcacctc cactcttca ccccccactc
 2641 accagtgtc cctccactgt cacattgaa ctgaactca ggataataaa gtgttgctc
 2701 ccagtacgt ccttctctt tctgagtc agctgggtgc tggccagggg ctggggagg
 2761 ggctgaagg tgggagagg cagagggagg tcggggagga ggtctgggga ggaggctcag
 2821 ggaggaggag gaaagtctc aagtctgtc gacattcatt ccgttagcac atatttatct
 2881 gagcacctac tctgtcaga cgtgggcta agtctgggg acacagcagg gaacaaggca
 2941 gacatggaat ctgactcga

Homo sapiens MCP1 (MCP1) gene, promoter region and partial cds.

ACCESSION AY357296

VERSION AY357296.1 GI:34559719

1 ccgagatgtt ccagcacag ccccatgtga gagctccctg gctccgggcc cagtatctgg
 61 aatgcaggct ccagccaaat gcattctct ctacgggatc tgggaacttc caaagctgcc
 121 tctcagagt gggaatttc actacttct ctacgccag cactgacctc ccagcggggg
 181 agggcatctt ttctgacag agcagaagtg ggaggcagac agctgtcact ttccagaaga
 241 ctttcttctc tgattcatc cctcacctt cctgtgtt actgtctgat atatgcaaag
 301 gccaagtcac ttccagaga tgacaactcc ttctgaagt agagacatgc ttccaacact
 361 cagaagccta tgtgaacact cagccagcaa agctgggaag ttttctctg tgaccatggg
 421 ctaattggtc tcttctctg gattgtggct ttatcagata aaaacaagtg gtcatgccac
 481 aggatgtcta taagccatt gattctggga ttctatgagt gatgtgata tgactaagcc
 541 aggagagact tatttaaga tctcagcatc ttacagctt ttaacctaga gaaaaccga

Fig. 3 (cont.)

601 agcatgactg gattataaag ggaaattgaa tgcggtccac caagttcatg gtaaaggatg
661 cactaacaga ttagagagag gtttcccctg atatgaggaa aacttcttgg aagatgaggt
721 gagatggcct aggaagaaat tcctacacaa aatgcacag tctctagtcc tggaacatt
781 ttattcattg gataagaatg gattgaggca tgagcagagg actgagacaa acacagagaa
841 gtttcaacac tggttgggga gaaaaggagt aactagttag attcaggcag aacaagaata
901 aggcctctca agaggcacaa gcaaagcagg gctcaggttg atttgtctc tcttcacct
961 gcttttcta attccaccag agtctgaaat gaccactcca tagagtctct gctctgggat
1021 tctccaggaa accaatatcc atcatgagac atcaagtcta gtcccaggaa gaagagattc
1081 tggaatggaa acatcctggg tgggagtctc agcacatcta ctattctgtc tgagtactg
1141 gacaaataac ttcagtttta acctaacgaa agctgggttg gttgaggac tgggcaggca
1201 gcgctggaaa gtatgtcagc accatacctg actccctgaa tgcactcaac aatgccatta
1261 ctgaccactt actagaaata aaacagtcatt ttgtgaata caaccctgtt ctttttcaa
1321 gtgtagttaa aagtgtttc ttcaagaaa ccccatgcat ttatagacat tgcctcagt
1381 accctttatg aaagaagtca ctagtcttg tatgcccatt gggcaagggc accgcaaggc
1441 tcagaaggag gaggcagtgg gctaggagaa tggagagatc agaattttaa actcagccca
1501 gccattaaca tgcctcaagt actcctatca ttttgaag agacaacagt tcaactgaaat
1561 gaattctaag gtctttgggt tttatcagt gtgctctgt agtttctgag gaaatctaag
1621 gcacaactga ggaatgaagt caggcttcc aattccgaa atactcctcc actgcttact
1681 catgtccctt ggaaattaag aaggaagcca ggagaatagc tgccataacc agggatgaac
1741 ttctgtcca ctgctgctg ctatgctagc aacagcctcc taactcataa tgacttagcc
1801 atgaggaatg tttctagatt ctctttagc tgtctgcca ttggaagat gctgaggaca
1861 gagagaggac ccaagcaggc aactagttag aggacttga cacgttctt tccagcagta
1921 tgcagagag gtgagcagcc cactggggac agggctgcct gggttctgtg ctgagggga
1981 cctgagcag gctatttaac cctctgtgc ctgagttgc tgatctataa catgaaaatt
2041 agcaatccct actagataaa gttggggaat ttacagagtt aatatttga aaggtctgag
2101 aatattctg gcagagtaag cactctgtga gtatgacact ggcatttct ctgagcact
2161 acatgctgc tatgccttg tccaagtctg aaaccctaga actcttagaa ttcaattcaa
2221 tgtttacaca atcctacagt tctgctaggc ttctatgatg ctactattct gcattgaat
2281 gagcaaatgg attaatgca ttgtcaggga gccggccaaa gctgagagc tcttctctg
2341 ctgggaggcc ccttgaatg tggcctgaag gtaagctggc agcgagcctg acatgcttc
2401 atctagttc ctgcttct tctttctg cagtttctgc ttacagaaa gcagaatcct
2461 taaaaataac cctcttagtt cacatctgtg gtcagtctgg gctaatggc acccatcct
2521 cccatttgc tcatgtgtc tcagcagtga atggaaaaag tgtctgtcc tgacccctg
2581 ctcccttct cacttctg gaaatccaca ggatgtgca ttgtcagc agatttaaca
2641 gccacttat cactcatgga agatccctcc tctgcttga ctccgccctc tctccctctg
2701 cccgcttca ataagaggca gagacagcag ccagaggaac cgagaggctg agactaacc
2761 agaaacatcc aattctaaa ctgaagctg cactctgccc tccagcatga aagtctctg
2821 cgccttctg tgctgtctg tcatgacgc cacttcatt cccaagggc tgcctcagc
2881 aggtgaaggcc cctcttct ctcttgaac cacattgtct tctctgag ttatcatgga

Fig. 3 (cont.)

2941 ccatccaagc agacgtggta cccacagtct tgctttaacg ctacttttcc aagataaggt
 3001 gactcagaaa aggacaaggg gtgagcccaa ccacacagct gctgctcggc agagcctgaa
 3061 ctagaattcc agctgtgaac cccaaatcca gctccttcca ggattccagc tctgggaaca
 3121 cactcagcgc agttactccc ccagctgctt ccagcagagt ttggggatca gggtaatcaa
 3181 agagaggggtg ggtgtgtagg ctgtttccag acacgctgga g

Homo sapiens macrophage migration inhibitory factor
 (glycosylation-inhibiting factor) (MIF), mRNA.

1 accacagtgg tgtccgagaa gtcaggcacg tagctcagcg gcggccgcgg cgcgtgcgtc
 61 tgtgccctcg cgcggtctc ctggtccttc tgccatcatg ccgatgttca tcgtaaacac
 121 caacgtgccc cgcgctcccg tgccggacgg gttcctctcc gagctacccc agcagctggc
 181 gcaggccacc ggcaagcccc ccagttacat cgcggtgcac gtggtcccg accagctcat
 241 ggccttcggc ggctccagcg agccgtgcgc gctctgcagc ctgcacagca tcggcaagat
 301 cggcggcgcg cagaaccgct cctacagcaa gctgctgtgc ggcctgctgg ccgagcgct
 361 gcgcatcagc ccggacaggg tctacatcaa ctattacgac atgaacgcgg ccaatgtggg
 421 ctggaacaac tccaccttcg cctaagagcc gcagggaccc acgctgtctg cgctggctcc
 481 acccgggaac ccgccgcacg ctgtgttcta ggcccgcca cccaacctt ctggtgggga
 541 gaaataaacg gtttagagac t

Homo sapiens macrophage inflammatory protein-1-alpha/RANTES
 receptor mRNA, complete cds.

ACCESSION L10918

VERSION L10918.1 GI:292416

1 ggcacgagcc cagaaacaaa gacttcacgg acaaagtccc ttggaaccag agagaagccg
 61 ggaatgaaac tcaaacacc acagaggact atgacacgac cacagagttt gactatgggg
 121 atgcaactcc gtgccagaag gtgaacgaga gggcctttgg ggcccaactg ctgccccctc
 181 tgtactcctt ggtattgtc attggcctgg ttggaacat cctggtggtc ctggtccttg
 241 tgcaatacaa gaggctaaaa aacatgacca gcatctacct cctgaacctg gccattctg
 301 acctgctctt cctgttcacg ctccctctt ggatcgacta caagtgaag gatgactggg
 361 ttttggta tgcatgtgt aagatcctct ctgggtttta ttacacaggc ttgtacagcg
 421 agatctttt catcatcctg ctgacgattg acaggtacct ggccatcgtc cacgcctgt
 481 ttgccttgcg ggcacggacc gtcactttg gtgtcatcac cagcatcatc atttgggccc
 541 tggccatctt ggttccatg ccaggcttat acttttcaa gacccaatgg gaattcactc
 601 accacacctg cagccttcac ttctctcag aaagcctacg agagtgggaag ctgtttcagg
 661 ctctgaaact gaacctctt gggctggtat tgcctttgtt ggtcatgac atctgctaca
 721 cagggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt
 781 tgattttgt catcatgac atctttttc tctttggac cccctacaat ttgactatac
 841 ttatttctgt ttccaagac ttctgttca cccatgagtg tgagcagagc agacatttgg
 901 acctggctgt gcaagtgcg gaggtgatcg cctacacgca ctgctgtgac aaccagtga
 961 tctacgcctt cgttggtgag aggttccgga agtacctgcg gcagttgtc cacaggcgtg

Fig. 3 (cont.)

1021 tggctgtgca cctgggtaaa tggctcccct tctctccgt ggacaggctg gagagggtca
 1081 gctccacatc tccctccaca ggggagcatg aactctctgc tgggttctga ctgagaccat
 1141 aggaggccaa cccaaaataa gcaggcgtga cctgccaggc aactgagcc agcagcctgg
 1201 ctctcccagc caggttctga ctctggcac agcatggagt cacagccact tgggatatag
 1261 agggaatgta atgggtggcct ggggctctg aggcctctgg ggcttcagtc ttccatga
 1321 acttctcccc tggtagaaag aagatgaatg agcaaaacca aatattccag agactgggac
 1381 taagtgtacc agagaagggc ttggactcaa gcaagatttc agatttgtga ccattagcat
 1441 ttgtcaaaa agtcacccac tccactat tgcctgcaca aaccaattaa acccagtagt
 1501 ggtgactgtg ggctccattc aaagttagct cctaagccat gggagacact gatgtatgag
 1561 gaatttctgt tcttccatca cctccccccc ccgcccacc tccactgcc aagaactgg
 1621 aaatagtgat ttccacagtg actccactct gagtcccaga gccaatcagt agccagcatc
 1681 tgcctcccct tactccac cgcaggattt gggctcttg aatcctgggg aacatagaac
 1741 tcatgacgga agagttgaga cctaacgaga aatagaaatg ggggaactac tctggcagt
 1801 ggaactaaga aagcccttag gaagaattt tataccact aaaatcaaac aattcaggga
 1861 gtgggctaag cacgggcat atgaataaca tgggtgtctt cttaaaatag ccataaaggg
 1921 gagggactca tcaattccat ttaccctct tttctgacta ttttcagaa tctctctct
 1981 ttcaagttg ggtgatagt tggtagatic taatggctt attgcagcga ttaataacag
 2041 gcaaaaggaa gcagggttg ttccctct tttgttct catctaagcc ttctggttt
 2101 atgggtcaga gtccgactg ccacttggga ctgtcagca aaaaaaaaaa aaaaaa

Mouse macrophage inflammatory protein 1-beta (MIP-1) mRNA, complete cds.

ACCESSION M35590

VERSION M35590.1 GI:199696

1 gcttctgaag ctctgggcc ctgcagtc agctctgtgc aaacctaacc ccgagcaaca
 61 ccatgaagct ctgcgtgtct gccctctctc tctcttct cgtggctgcc ttctgtgctc
 121 cagggtctc agcaccaatg ggctctgacc ctccacttc ctgctgttc tcttacacct
 181 cccggcagct tcacagaagc ttgtgatgg attactatga gaccagcagt cttgtctca
 241 agccagctgt ggtattctg accaaaagag gcagacagat ctgtgctaac ccagtgagc
 301 cctgggtcac tgagtacatg agtgacttg agttgaactg agcagctcca gcggcagggc
 361 aggaggagcc acttcaggag aggcctctc agccctgatg cttctactg agaagcgtcc
 421 ttgctctca cgttcagatt tctgcccct cttcttaatt taaatctctg ttagacttt
 481 gttttgttt ttgggggag tattattct attattatg tttagttat aggacgcgtg
 541 tctcccatgg agatggcca ccattgctgt ttctctgcta ttgtgatat gactgtgaaa
 601 ttgattcat gcatttcat aataaatctt tcttaag

Human macrophage inflammatory protein 3 alpha (MIP-3a) mRNA, complete cds.

ACCESSION U77035

VERSION U77035.1 GI:1790924

Fig. 3 (cont.)

1 atgtgctgta ccaagagttt gctcctggct gctttgatgt cagtgtgtgt actccacctc
 61 tgcggcgaat cagaagcagc aagcaacttt gactgtgtgc ttggatacac agaccgtatt
 121 cticaccta aatttattgt gggcttcaca cggcagctgg ccaatgaagg ctgtgacatc
 181 aatgctatca tcttcacac aaagaaaaag ttgtctgtgt gcgcaaatcc aaaacagact
 241 tgggtgaaat atattgtgcg tctcctcagt aaaaaagtca agaacaatga aaaactgtgg
 301 cttttctgga atggaattgg acatagccca agaacagaaa gaacctgtgt ggggttggag
 361 gtttcacttg cacatcatgg agggtttagt gcttatctaa ttgtgcctc actggacttg
 421 tccaattaat gaagttgatt catattgcat catagttgc ttgtttaag catcacatta
 481 aagttaaact gtatttatag ttatttatag ctgtagggtt tctgtgtta gctattaat
 541 actaatttc cataagctat ttggtttag tgcaaagtat aaaattatat ttggggggga
 601 ataagattat atggactttt ttgcaagcaa caagctattt tttaaaamma actatttaac
 661 attctttgt ttatatgtt ttgtctccta aattgttgta attgcattat aaaataagaa
 721 aaatattaat aagacaaata ttgaaaataa agaaacaaaa agtt

Human macrophage inflammatory protein 3 beta (MIP-3beta) mRNA,
 complete cds.

ACCESSION U77180

1 atggccctgc tactggccct cagcctgctg gttctctgga cttcccagc cccaactctg
 61 agtggcacca atgatgtga agactgtgtc ctgtctgtga cccagaaacc catccctggg
 121 tacatctgta ggaacttcca ctacctctc atcaaggatg gctgcagggt gcctgtgtga
 181 gtgtcacca cactgagggg ccgccagctc tgtgcacccc cagaccagcc ctgggtagaa
 241 cgcacatcc agagactgca gaggacctca gccaatgta agcggccgag cagttaacct
 301 atgaccgtgc agaggagacc cggagtccga gtcaagcatt gtgaattatt acctaacctg
 361 ggggaaccgag gaccagaagg aaggaccagg ctccagctc ctctgcacca gacctgacca
 421 gccaggacag ggcctggggg gtgtgtgagt gtgagtgtga gcgagagggt gagtgtggc
 481 tagagtaaag ctgtccacc cccagattgc aatgctacca ataaagccgc ctggtgttta
 541 caact

H.sapiens gene for chemokine HCC-1.

ACCESSION Z49269

VERSION Z49269.1 GI:1004266

1 gagctccgtt gggagtccca tgttcttta tggcataatg ggtgagaaca cagacttga
 61 agccaaacca cctgaatttg aacccagtt ccattacca actgtcaaaa gcttaggctt
 121 tgattctaag ccgtttcct caactgtgt tctaaagatt aaataggcta atattcataa
 181 ggcaactggg acagtggctt gtgtgtatag caaccattat ataagtgaat tatctactga
 241 gcaccacagc acttcttcac tccatgggtg ggtgaccaga atggagatga gacagagaac
 301 tgcagggtct gcttcgagtt taagtttaga ttcccttga ccaatgagac ctgacttga

Fig. 3 (cont.)

361 ggagtcctgg cctcattcca ttaccccaaa caccctctag tctctagatg aacagatcct
 421 gaatgtccag gcccacgtg gcctgttcta aggcctgaga tggaattgga tacaggacac
 481 atccagcctt gagatcttt gctaagtggt acacagtgcc ccagccctg tgctcatgtt
 541 catgcctagg gaaaggctt tatcaaaaga gttgaactt tcccactgg ggatggaaga
 601 ccatttctc ccttaaacct tggctctccc tgcctcttc aggccaccaa caacacatgt
 661 gcaggatatg aaattgctga ggcatcactg ctttctact tcccttcaa gtctcagctc
 721 ccttatttta aaaaatattt ggcctcaatg atcatttctc aacaattcct caccgcagga
 781 gcctctgaag ctcccaccag gccagctctc ctcccacaac agctcccac agcatgaaga
 841 tctccgtggc tgccattccc ttctctctc tcatcaccat cgccctaggg accaagactg
 901 aatctctctc acgtgagtgc aatgcctgt cttccttcca acctagagcc tgcagggaaa
 961 taagcaggag tgagggtggg gctcagggga agaccaggag cagggactca gaaaggaggg
 1021 ctggtatctt ctgaaattg tgtgtatagc aacattatat aaatgaatta tctactgagc
 1081 accacagcac ttaccccat ggtgtgggta gcaggatgga gatgagactt aggactgtag
 1141 gttctgcta agagttaag ttgggatctt ccagcctga ccaatgagac ttgacttggg
 1201 agactccagg ctctattcca ctaccccaaa tgcctctag tctccaaata aacagatcct
 1261 gaatctccag gccacacatg gcctgatct ctatcattg cccccagga ccagtcccc
 1321 ctgcccctca aggacatgga gtgagaccag cctgcctctc tactccctca atttctctt
 1381 cttgcccgt aagcaaaaga gtggcccacc ccatgtggg tatatttct cagggagatt
 1441 aggagcagt tcttgagccc ctcaagggca ttttctatt ggcctcctga ggttggggc
 1501 cagcctgctt ccagcgtcac ctgtgccag tgagtgcagc attgctggg tatgggctgg
 1561 ggggaaacac gacagtgtg ggtccatct agggccctt ttctcagctg atttctaga
 1621 ataagctgcc tttagagata accaaaacta ttatcactc ttccatttta cctactctc
 1681 tttcagaaa ctggggggaa accgaaggtt gttaaaatac agctaaagt ggtgggtatg
 1741 tgcacagttt gacttgccct ctccgatgtc attgtcagc tcagaggaac aagggtggag
 1801 agtataggag ctctgactgg gtctcaggaa acagggggcc ctatgccgt tcttggatc
 1861 gtgaggatgc tgcctggaat ggagctggaa aacaggatga gacccttcca ccagacatc
 1921 tggccaccct cagtacctc tgaggccatt gtatgcaca tccatgattc tatgaagcag
 1981 ggtcacataa catgcacaca cctgatttct ccactccata accacaacat gtgcctgtt
 2041 gtacagggtc ctggcctac aatgtcctc ctgctacctc tataattcaa gcttggggtg
 2101 gctgctgtca cctgtctt cctataaaag ccatgaaact tctcaatcag aaaatagatg
 2161 aaaaaatcac ccaatccagt gatttttaa actttttaga ccacaaaacc ttttctcaa
 2221 gcaatatctt ccacagaggc ccaatatgta aaacagaaaa aatgggttga gtaggggtaca
 2281 agacaccact ctcaaatgca gcaaggctc cacaatagtc cctgaggccc ccagagctca
 2341 gtgtaaaaac cactgatgca gtccaagggt ctcatttaca gaggaggga cagggggaaa
 2401 gtaaatggc cacagtacac aggaagcaca ggcaaggta ggttaggatt tgggtgccct
 2461 gactctgtg ctttgcct tgggcttgc tgtggcatc ctgctctc tgcaggtgt
 2521 cgggtcaatg gggacatgg caggggtgg cactaggagg ggctgggtt gcattccaa
 2581 atggcatgtc tccaaatccc tattgggatt tcttccaaat attcctcta tttggagcac
 2641 cttcccgaa taaggcatga aggtgcatg atattggcca agtccctagc ctctctgcc

Fig. 3 (cont.)

2701 agtcggcccc cagagatggt gtaagaagat ctgagtgtgc tgctctcaa tcctggagtt
 2761 gaaagtcac caccagtctt tccaagaggg gttgaagaaa aggaggaagg gtgattgatg
 2821 atgagggagg agaaaaagaa gagcccagga gtacatgga gaaggagaag agaagatgag
 2881 gaaagcctac tctccccctc aagtctgag gggctgtctc ctcttctt cctctctcca
 2941 tgccctcagc ttgcaggagc agccaatggt atggccttta acaaggggcc cctctcagc
 3001 atctgatgct ctctctcag ggggacctta ccacccctca gattgtgct tcacctacac
 3061 tactacaag atccgcgtc agcggtat ggattactat gagaccaaca gccagtgtc
 3121 caagcccga attgttagg tggtagacac acatcacact ggggggagag ggagccagca
 3181 gggcctcctg gaggaagca gggagtgtg gtggaatggg gacccccagc gtacctcca
 3241 ggtgtgacta catggggaga ggcagctgag gggcaatctg agcgcttct ggttgagcc
 3301 tgaggagcc atggggaaac tgacccatg gatggggaga tgacagagaa gggagaagaa
 3361 ggcaagagg cacttctca gggggacaca gagactagat ggtctaggg gtcctaggaa
 3421 ccgaagagta tctctcagag aggagactgg ctctaagctg cctctgtgga agaaaggaaa
 3481 agcagtatag gtcagggtgg gaatttagga gggagggaag atgggctgtc tctccggcc
 3541 actggcccc tcggttggt atcttctcc ctctgtctc acagcttcat cacaaaagg
 3601 ggccattccg tctgtacaa cccagtgac aagtgggtcc aggactatat caaggacatg
 3661 aaggagaact gattgacca gaaggggtg cgaaggcaca gtcagagac ataaagagaa
 3721 gatgccaagg cccctctc caccaccgc taactctcag cccagtcac cctctggag
 3781 ctccctgct tgaattaa gaccactcat gctcttccct ggctcattc cttctacgg
 3841 gattactca ttggcctgc actgaggaca ccagggtgtg gcacctcgg catcaagcct
 3901 cgctcgcag aagtttggg ggagcctgtt acaaaaaata ggtcaggcct gcaatgcagg
 3961 tagtgagaag cagaaagtga gaaagaaaag cagtglaaag accgtctct cctcagcagc
 4021 aacagtagca gaccccg

H.sapiens mRNA for chemokine HCC-1.

ACCESSION Z49270

VERSION Z49270.1 GI:1004268

1 agccttgaa gctccacca ggccagctct cctccacaa cagcttcca cagcatgaag
 61 atctccgtgg ctgccattcc cttctctc ctcatacca tcgcctagg gaccaagact
 121 gaatctctc cagggggacc ttaccacccc tcagagtgt gttcaccta cactacctac
 181 aagatccgc gtcagcggat tatggattac tatgagacca acagccagtg ctccaagccc
 241 ggaattgtct tcatcacaa aaggggcat tccgtctgta ccaacccag tgacaagtgg
 301 gtcaggact atatcaagga catgaaggag aactgagtga ccagaaggg gtggcgaagg
 361 cacagctcag agacataaag agaagatgcc aaggccccct cctcaccca ccctaactc
 421 tcagccccag tcacctctt ggagcttccc tgcttgaat taaagaccac tcatgtctt
 481 c

Human myeloid progenitor inhibitory factor-1 MPIF-2 mRNA, complete

Fig. 3 (cont.)

cds.

ACCESSION U85768

VERSION U85768.1 GI:1916251

1 atggcaggcc tgatgacat agtaaccagc cttctgttcc ttggtgtctg tgcccaccac
61 atcatoccta cgggctctgt ggtcataccc tctccctgct gcatgttctt tgtttccaag
121 agaattcctg agaaccgagt ggtcagctac cagctgtcca gcaggagcac atgcctcaag
181 ggaggagtga tcttcaccac caagaagggc cagcagttct gtggcgaccc caagcaggag
241 tgggtccaga ggtacatgaa gaacctggac gccaaacaga agaaggcttc ccctagggcc
301 agggcagtgg ctgtcaaggg ccctgtccag agatatcctg gcaaccaaac cacctgctaa

Mus musculus mRNA for thymus and activation regulated chemokine
(TARC gene).

ACCESSION AJ242587

VERSION AJ242587.1 GI:5102777

1 gaagacctc acctcagctt ttggtacat gaggtcactt cagatgtctg tcttggtctg
61 tctgcttctg gggacttttc tgcagcatgc cagagctgct cgagccacca atgtaggccg
121 agagtgtctg ctggattact tcaaaggggc cattcctatc aggaagtgg tgagctgta
181 taagacctca gtggagtgtt ccagggatgc catcgtgttt ctgactgtcc agggcaagct
241 catctgtgca gaccccaaag acaaacatgt gaagaaggcc atcagattgg tgaaaaaccc
301 aaggccgtga ccttcccgct gaggcatttg gagacgccag ggctgtctgc catggtttca
361 acataaagcg gcctgtgacc agcagagccc aagagcagcc acagagcaga agtccctgtt
421 ccctttttta tggactctta tgcactacag gcgaacacaa aaaaaagcaa cggaataaag
481 ccttctctcc tc

Human line-1 reverse transcriptase gene, partial cds, and
granulocyte chemotactic protein-2 (GCP-2) gene, complete cds.

ACCESSION U83303

VERSION U83303.1 GI:1916228

1 aagaaagtca ttggtagctt gatggggatg gtattgaatc tataagttac ctggggcagt
61 atggccatat tcacgatatt gatttttctt acctatgagc atggaatatt ctccatttg
121 ttgtatcct cttttatttc attgagcagt ggttttagt tctcctgaa gaggtccttc
181 atgtcccttg taagtggat tcttaggtat ttattctct tgaagcaat tgtgaatggg
241 agttcactca tgatttggct ctctgtttgt ttgtattgg tgtataagaa tgcttgtgat
301 tttgtgcat tgatttggta tctgagact ttgctgaagt tgcttatcag ctaaggaga
361 tttgggctg agaccatggg gtttctaga tatacaatta tgtaatttc aaataggagc
421 aatttgactt cctctttcc taattgaata ccctttatt ccttctctg cctaattgtc
481 ctggccattg gagaggagga gcatctccca gacagctgcg tgccctagag aagccagcct

Fig. 3 (cont.)

541 cgctaacccc tcaagcccag gggatgagac cctcctgaat cgctgctcta tttggctgg
601 agccacagct cctccaccg cggggcgggg ctaaaatgtc ctcccccta agggagcagg
661 cagctcctcc cagccaccca cccaccaat tccatcctc cgcggccct ccaccaaccc
721 ctctttcca cactgcccc tgagttcagg gaattcccc agcatccaa agcttgatt
781 tctgccagt cgggagggat gaatgcagat aaaggagtg cagaaggcac gaggaaacca
841 aagtgtctg tatctccag tctccgccc tccaccagc tcaggaaccc ggaaccctc
901 tctgaccac tatgacctc cgtccagcc gcgcggcccg tgtccgggt cctcgggt
961 cctgtgccc gctgctcgc ctgctctcc tctgacgcc gccggggccc ctgccagcg
1021 gtgagagctc ctggcactgg ggtgcatccc agcctctgc gggccgctgc gttccagga
1081 actctcccag caacctgccc tataaaaatg tcttctcc ccagctggc ctgtctctg
1141 tgtgtgaca gagctgcgt gactgttt acgcgttac ctgagagtaa accccaaaac
1201 gattggtaaa ctgcaggtg tccccgagg ccgcagtc tccaaggtg aagtgtgta
1261 agttctctg tgtgtctg tccactgtga cttagcaag tctccagcc tgggtctga
1321 acctgttg ctatgggtg catctctt tcttactt cagagcctc ctgaagaacg
1381 ggaagcaagt ttgtctggc ccggaagccc ctttctaaa gaaagtcat cagaaaatt
1441 tggacaggta ttgtccctt tgatcttgt ggtgtttta tatctctat ggaaagcata
1501 tacttcacaa tgccttatt ctctcttag gatttagact atgcttagaa ttataaggt
1561 gtaagaaga ataaggaaac tttttctg gaatgtctg ggtaaacct taccaccaat
1621 ctacatgcc tgaacaatta cacagagctc attactgaca tctattttt gtctgtctt
1681 tgccttatt gatttttt cccacacaaa cgctttgaa aaccaaagt agcatacaag
1741 agtgtgggaa ttggtatata taatataact ctttctcaa cagtggaaac aagaaaaact
1801 gagtaacaaa aaagaccatg catcataaaa ttgccagtc ttcagcggag cagttttctg
1861 gagatccctg gaccagtaa gaataagaag gaagggttg tttttcca tttctacat
1921 ggattcccta cttgaagag tggggggaa agcctacgt tctccctgaa gtttacagct
1981 cagctaatga agtactaata tagtattcc actatttact gttattttac ctgataagt
2041 attgaacct ttggcaattg accatattg gagcaaagaa tctctggtta ttgtcttc
2101 aatgaatatt gaattgaaga taactattg attctatca tacattcctt aaagtctac
2161 cgaagggtg ttggattctg tatgaaata atgtttatt agtgtctgt tgaggagggt
2221 atctgtgt tcttactcac tcttctata aaataggaaa tatttagt ctgttctg
2281 gggaatatgt tacttttac cctaggatgc tatttaagt gtactgtatt agaacactg
2341 gtgtgtcata cgttatctg tgcagaatat atttcttat tcagaattc taaaaattta
2401 agttctgtaa gggctaatat atttctcc tatggttta gacgttgat gtctcttag
2461 tatggcataa tgcattgatt tactcattaa actttgatt tctatgctat ttttacta
2521 taggatgact ataattctg tctactaata tacacttag atagatgaag aagcccaaaa
2581 acagataaat tctgattgc taattacat agaatgtat tcttgggt ttttaataa
2641 aagcaaaatt aacaatgatc tgtgtctga aagtttgaa aatatattg aacaattga
2701 atataaatc atcatttagt cctcaaaaata taccagcat tctaaagatt ttcagatc
2761 tattgtgat ctttaagagg tttagcat ttgtatga ggaattatac atgtatcaca
2821 ttactatat taaaattgca ctttattt tctgtgtg tcatgttggt tttgtact

Fig. 3 (cont.)

2881 tgtattgtca ttggagaaa caataaaaga ttctaaacc actgatgtg ttctcctc
 2941 ttatacagtt actatttatc tttaattcta cattattcaa aatattacct ctgctcttct
 3001 ctggctggca gagaggccct cattacccaa taccattgca ttggttcaac ttttccat
 3061 gtccagcccc ctccagtta ctcttcaca gcaccaatag cctctggggt cttagaaaa
 3121 cacaatagg ataagattt cctatctaaa ttctaaatg gctccctgtt tctagacat
 3181 gaaataaaaag ttgctaaaca tgaatgaatg ggtctgtct catctcactc ctgatcatg
 3241 gtacttcaac ttccctgtg cctcacattc actatagtca ggcgttcagt tccctaacta
 3301 ggcatgttct tccccaggc tcatgacttt gtatttgcta gggctcttac ctggaaagca
 3361 ttacgtttt cctgcgtata agaggaggct tatcatcct tcagaactca gtccaagcaa
 3421 tatctcctc gtgaatttc ctggcacac tcagcaaagc

H.sapiens mRNA for granulocyte chemotactic protein.

ACCESSION Y08770

VERSION Y08770.1 GI:1769436

1 ggtcctgtct ctgctgtgct cacggagctg cgttgcactt gtttacgct tacgctgaga
 61 gtaaacccca aaacgattgg taaactgcag gtgtcccg caggcccgca gtgctccaag
 121 gtggaagtgg tagcctccct gaagaacggg aagcaagtt gtctggacc ggaagccct
 181 ttctaaaga aagcatcca gaaaatttg gacagtggaa acaagaaaaa ctgagtaaca
 241 gtcgacgcgg ccgc

Human gro alpha gene 5' end.

ACCESSION M65005

VERSION M65005.1 GI:183624

1 tccacctct caggtggtat ctccagcgca ggctgccact cagccccct ccagggatct
 61 ggggcagaag gcgaatatcc cagagtctca gattccacag gattactct gaagggcgag
 121 ccgcgggctg catcagtga cccccacacc ccaccgcac ccaagcgct ccaccctggg
 181 ggcggggcgc tcgccttct tccgactcg ggatcgatct ggaactccgg gaatttcct
 241 ggcccggggg ctccgccctt tccagccca accatgcata aaaggggttc gcggatctcg
 301 gagagccaca gagccgggc cgcaggcacc tctcgccag ctctccgct ccttcacag
 361 ccgccagacc cgcctgctga gccccatggc ccg

Human gro beta gene 5' end.

ACCESSION M65006

VERSION M65006.1 GI:183630

1 cgcctctcg caggcggta tctcggtatc tctgagagcg gcgggctctc gctcccgtc
 61 cagggttcg gggcagaaag agaacatccc acagttggcg ggagttacgc aagacagtca
 121 gaccggagc tcatcgtga gtgcccgcac cccctccac ccagaggcg gggccatcgc

Fig. 3 (cont.)

181 cttccttccg aactcgggat cgaatctggag ctccgggaat ttccctggcc cgggactccg
 241 gctttccagc cccaaccatg cataaaaggg gttcgccgtt ctggagagc cacagagccc
 301 gggccacagg cagctcctg ccagctctcc tctcgcaca gccgctcgaa ccgctgctg
 361 agcccatgg cccg

Human cytokine (GRO-gamma) mRNA, complete cds.

ACCESSION M36821

VERSION M36821.1 GI:183632

1 cacagccggg tcgcaggcac ctcccngcc agctctccc cattctgcac agcttcccga
 61 cgcgtctgct gagcccatg gccacgcca cgctctccg cggcccccagc aatccccggc
 121 tcttgcgggt ggcgctgctg ctctgctcc tggtagggcag ccggcgcgca gcaggagcgt
 181 ccgtgttcac tgaactgctg tgccagtgtg tcagacact gcagggaatt cacctcaaga
 241 acatccaaag tgtgaatgta aggtccccg gacccactg cgcccaaacc gaagtcatag
 301 ccacactcaa gaatgggaag aaagcttgc tcaacccgc atccccatg gttcagaaaa
 361 tcatcgaaaa gatactgaac aaggggagca ccaactgaca ggagagaagt aagaagctta
 421 tcagcgtatc attgacatt cctgcagggt ggtccctgcc ctaccagag ctgaaaatga
 481 aaaagagaac agcagcttc tagggacagc tggaaaggga cttaatgtgt ttgactattt
 541 ctacgaggg ttctacttat ttatgtatt attttgaaa gcttgattt taatatttta
 601 catgctgta tttaaagatg tgagtgtgt tcatcaaca tagctcagtc ctgattattt
 661 aattggaata tgatgggtt taaatgtgc attaaactaa tatttagtgg gagaccataa
 721 tgtgtcagcc acctgataa atgacagggt ggggaactgg agggtnggg gattgaaatg
 781 caagcaatta gtggatcact gtagggtaa gggaatgtat gtacacatct atttttata
 841 cttttttt taaaaagaa tgcagtgt tattattca aattatctca cattatgtgt
 901 tcaacattt tatgtgaag ttcccttag acatttatg tctgctgt agggcataat
 961 gcctgttta atgtccatc tgcagcgtt ctcttcct tggaaaagag aatttatcat
 1021 tactgttaca ttgtacaaa tgacatgata ataaaagtt tatg

//

Homo sapiens neutrophil-activating peptide 78 (ENA-78) gene,
 complete cds.

ACCESSION L37036 Z46254

VERSION L37036.1 GI:607030

1 gaattctcag taagcggact taccaaagta ggtgatctgt aggggagtta acaaaattca
 61 gtggtcctt caggccactg actcaagtg gcaagagaca agggctctt gttatcatgt
 121 tatctggct tccaaagctg gttgaagtcc agagattcat aaagtcattc aagaaaccta
 181 gaatgacctg cctgcaagaa gacaggaagg acttcagtt tatagcaatt caaacatgaa
 241 taacatttcc tgattaatag taataataat tagaaaggat tgacttcag aaattttct
 301 caaatcaagg ctctgttac ttgggtcca cttttctct ctagaaggag aggaggagca
 361 tctccagat gctgctgtc ccagaaaagc cggcatccct agccgctct ggcacaggcc

Fig. 3 (cont.)

421 atgaggcgct gctgaatcct gctgaatagc tactcccttc tagctggagc cacagctccc
 481 tccaccgcgg aacagggtta caacgtccct ctcggtagag gtgcacgcag ctctcctgg
 541 ccacctccc caccagtcc cattgtctgg cccccctccc ccaacctctt cttccacac
 601 tgcccatga gttcaggga ttccccagc atcccaaagc ttgagttcc tgtcagtgg
 661 gagagatgag ttagataaa aggagtgcag aaggaacgag gaagccacag tgctccggat
 721 cctccaatct tcgtccctcc aatctccgct cctccacca gttcaggaac ccgcgaccgc
 781 tcgcagcgct ctctgacca ctatgagcct cctgtccagc cgcgcggccc gtgtccccgg
 841 tccttcgagc tcctgtgcg cgtgttggg gctgctgctg ctgctgacgc agccagggcc
 901 catcgccagc ggtgagagcg catggcgcgc gggacgcact cgcactcggg cacagagggtg
 961 catccagcc tctgcggggg cgctgcgttc cagggaactc tccagcaac ctgccctata
 1021 aagggtgct ctcttcttc ccagctggt cctgccgtg ctgtgtgag agagctgct
 1081 tgcgttgtt tacagaccac gcaaggagt catccaaaa tcatcagtaa tctgcaagt
 1141 ttgccatag gccacagtg ctccaagggt gaagtgggt aagtctgtg ctgctgtgc
 1201 cgctgtgacc ttggcaagag agaaatccc cagcctgggt cttaacctt ggtatctcat
 1261 gagtgtatct tcttttct tccttcagag cctccctgaa gaacgggaag gaaattgtc
 1321 ttgatccaga agccccctt ctaaagaaag tcatccagaa aattttggac ggttactgt
 1381 cactttgatc ttgtgggtt ctaaactga tctagggaga ccatagactt cacaaggct
 1441 ttattctctg tacgatttaa gtaacactt tcatgtttag aattaaaagg ttgtgaatt
 1501 gggaaagtt ttctggattg tcctgggaaa atataccaat ctacatgta attactgag
 1561 caattacaca cagcttgta ctaagtatg tttttgtt acccattgct ttattgatt
 1621 ttgtattct cctttttac caaacatcat aaacgtgag ttgtgacaag ggtggagtag
 1681 aaaggagtgt gaaaaatgt taaactaata taacatttt ctcaacagtg gaaacaagga
 1741 aaactgatta agagaaatga gcacgcagtg aaaagttcc cagtctcag cagagaagtt
 1801 ttctggagggt ctctgaacct aggaagaca agaaggaaag atttgtgtg ttgtgttta
 1861 ttgttttc cagtagttag ctctctcct ggattcctca cttgaagag tgtgagaaa
 1921 acctatgtt gccgcttaag cttcagctc agctaataa gtgttagca tagtacctt
 1981 gctatttct gttatttat ctgctatgct attgaagtt tggcaattga ctatagtgtg
 2041 agccaggaat cactggctgt taatcttca aagtgtctg aattgtaggt gactattata
 2101 ttccaagaa atattccta agatattaac tgagaaggct gtggatttaa tgtggaaatg
 2161 atgttcata agaattc

Rattus norvegicus monokine induced by gamma interferon (Mig) mRNA,
complete cds.

ACCESSION AF537208

VERSION AF537208.1 GI:33331077

1 ttctctaaat aaatagacc accaagaaca tgttctctga agacattctc agccttgact
 61 ccagcacggt gacttaatag agctcggctc tgccatgaag tccgtgtcct tattctcat
 121 gggcatcatc ttctggatc actgtggagt tcgaggaacc ctatgataa ggaatcagcg
 181 atgctcctgc atcagacca gccaaaggac attccactac aaatccctca aagacctcaa

Fig. 3 (cont.)

31 / 186

241 acagtttgcc ccaagcccta actgcaacaa aactgaaatc atcgctacac tgaagaacgg
 301 agatcaaacc tgcctagacc cagattcagc aagggtgaag aagctgatga aagaatggga
 361 gaaaaagatc agccaaaaga aaaagcaaaa gagggggaaa aaccatcaaa ggagcaagaa
 421 aacccgaaaa gctaaaacac cccaccatcc ggagtcaaag aagactgcat aagagaccac
 481 ttaccaaca agcgctctgc atctaaacgg ctttagatc atactaaaac gccttcctt
 541 taatacaciaa ctgc

Rattus norvegicus interferon-inducible T-cell a chemoattractant

I-TAC mRNA, complete cds.

ACCESSION AY340181

VERSION AY340181.1 GI:33304495

1 atcaccagag ccacagcaga gagctgcagc tgccgctgag atgaacagga cgggcatggc
 61 cgtagccctg gctatgatca tctgggccac aacggtcca ggctcgtta tgtcaaagg
 121 ggggcgctgt cttgcatcg accgaggagt gaaagtggc aaaatggcag caatcaagga
 181 agtttctgta atttaccga gtaacggctg tgacaaagt gaagtattg ttaccctgaa
 241 ggctcataaa ggacaaaggt gcctggacc caccatcaag caagctgcc tcataatgca
 301 gacaatacaa aaaaagaatt tttaaggcg ccagaacatg tgatgggccc tcaaatcga
 361 gctctgtgcc aagaagctga ccctctctg tcttgaata tgcacggtt ttgccagatt
 421 gcagaactcg ctaggaggc ggatacctt aaactattt gcttggctat gaaaatatt
 481 atctgaaga gtcattgtc tctgtgtg caca

//

Homo sapiens chemokine (C-X-C motif) ligand 12 (stromal
 cell-derived factor 1) (CXCL12), mRNA.

ACCESSION NM_000609

VERSION NM_000609.2 GI:29837664

1 tctccgtcag ccgattgcc cgtcggcgt ccggccccc acccgigctc gtccgccgc
 61 ccgcccgcgc gcccgcgcca tgaacgcaa ggtcgtggc gtgctggtc tctgtctgac
 121 cgcgctctgc ctacgcagc ggaagcccgt cagcctgagc tacagatgcc catgccgatt
 181 ctctgaaagc catgttgcca gagccaacgt caagcatctc aaaattctca acactcaaaa
 241 ctgtgccctt cagattgtg cccggctgaa gaacaacaac agacaagtgt gcattgacc
 301 gaagctaaag tggattcagg agtacctgga gaaagctta aacaagaggt tcaagatgt
 361 agagggtcag acgcctgagg aaccttaca gtaggagccc agctctgaaa ccagtgttag
 421 ggaagggcct gccacagcct cccctgccag ggcagggccc caggcattgc caagggctt
 481 gtttgcaca cttgccata ttaccatc ttgattatgt agcaaaatac atgacattta
 541 ttttcattt agtttgatta ttcatgtca ctggcgacac gtagcagctt agactaaggc
 601 cattattgta ctgccttat tagagtgtct ttccacggag ccaactcctt gactcagggc
 661 tcttgggtt tttattctt gagctgtgca ggtggggaga ctgggctgag ggagcctggc
 721 cccatggtca gccctagggt ggagagccac caagaggac gcctgggggt gccaggacca
 781 gtcaacctgg gcaaagccta gtgaaggctt ctctctgtgg gatgggatg ttgagggcca

Fig. 3 (cont.)

841 catgggaggc tcacccctt ctcacccac atgggagccg ggtctgcctc ttctgggagg
 901 gcagcagggc taccttgagc tgaggcagca gtgtgaggcc agggcagagt gagaccagc
 961 cctcatcccg agcacctcca catctccac gtctgtca tcattctctg tctcatccat
 1021 catcatgtgt gtccacgact gtctccatgg ccccgcaaaa ggactctcag gaccaaagct
 1081 ttcatgtaaa ctgtgcacca agcaggaaat gaaaatgtct tgtgttacct gaaaacactg
 1141 tgcacatctg tctctgtgt ggaatattgt ccattgtcca atcctatgtt ttgttcaaa
 1201 gccagcgtcc tctctgtga ccaatgtctt gatgcatgca ctgtccccc tgtgcagccg
 1261 ctgagcgagg agatgtcctt tgggccctt gagtgcagtc ctgatcagag ccgtggctct
 1321 ttggggtgaa ctaccttgg tccccactg atcacaaaaa catggtgggt ccatgggcag
 1381 agccaaggg aattcgggtg gcaccagggg tgacccaga ggattgtgc ccatcagtg
 1441 ctccctcaca tgcagtacc ttcaaactag ggccaagccc agcactgctt gaggaaaaca
 1501 agcattcaca actgtttt ggttttaaa acccagtcga caaaataacc aatcctggac
 1561 atgaagattc ttcccaatt cacatctaac ctcatctct tcaccattg gcaatgcat
 1621 catctcctgc ctctcctg ggccctct gctctgcgtg tcacctgtgc ttggggccct
 1681 tcccacagga cattctcta agagaacaat gtgctatgtg aagagtaagt caacctgcct
 1741 gacatttga gtgtccct cccactgagg gcagtcgata gagctgtatt aagccactta
 1801 aaatgtcac tttagacaaa ggcaagcact tgggggtt tttttgtt ttattcagt
 1861 ctacgaata ctttgcct ttgattaaag actccagta aaaaaattt taatgaagaa
 1921 agtgaaaac aaggaagtca aagcaaggaa actatgtaac atgtaggaag taggaagtaa
 1981 attatagta tgaatcttg aattgtaact gtctgtaat ttaataatct gtagggtaat
 2041 tagtaacatg tgtaagtat ttcataagt attcaaat ggagctcat ggcagaaggc
 2101 aaacctatca acaaaaattg tccctaaac aaaaattaaa atctcaatc cagctatgtt
 2161 atattgaaa aatagagcct gagggatct tactagtat aaagatacag aactcttca
 2221 aaacctttg aaattaacct ctactatac cagtataat gagtttcag tggggcagtc
 2281 attatccagg taatcaaga tatttataa tctgtcagc agaacttga tgtacctgc
 2341 ccaatccat gaaccaagac cattgaattc ttggtgagg aaacaaacat gacctaat
 2401 ctgactaca gtcaggaaag gaatcattc tattctcct ccatgggaga aaatagataa
 2461 gagtagaaac tgcaggaaa attatttga taacaattc tctactaaca atcagctcct
 2521 tctggagac tggccagta aagcaatat catttaata cagtctcca ttgcaaggg
 2581 aaaagtctct tgaatccga atctctttt gcttcgaac tgctagtcaa gtgcgtccac
 2641 gagctgttga ctaggatcc ctcatctgt cctccgggac ctggtgtgc ctctacctga
 2701 cactccctg ggctccctg aacccttca gaggccctg ctgccagtc tgtatcagga
 2761 cccagaggaa ggggccagag gctcgtgac tggctgtgtg ttggatga gtctgtcca
 2821 cgtgtatgt ctgtgtgt tccccctg tccaggcact gagataccag cgaggaggct
 2881 ccagagggca ctctgtgt tattagagat tacctctga gaaaaagct tccgcttga
 2941 gcagaggggc tgaatagcag aagggtgcac ctccccaac cttagatgt ctaagtctt
 3001 ccattggatc tcattggacc ctccatggt gtgatctct gactggtgt atcacctgg
 3061 gctccctgac tgggagtga tgccttcc cagggtctac acccttcc agctggatga
 3121 gaattgagt gctctgatcc ctctacagag ctccctgac tcattctgaa ggagcccat

Fig. 3 (cont.)

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3181 tcctgggaaa tattccctag aaacttccaa atcccctaag cagaccactg ataaaacat
3241 gtagaaaatt tgtatattg caacctcgct ggactctcag tctctgagca gtgaatgatt
3301 cagtgttaaa tgtgatgaat actgtattt gtattgttc aagtgcattt cccagataat
3361 gtgaaaatgg tccaggagaa ggccaattcc tatacgcagc gtgctttaa aaataaataa
3421 gaaacaactc ttgagaaac aacaatttct acttgaagt cataccaatg aaaaaatgta
3481 tatgcactta taattttct aataaagttc tgtactcaaa tgta

Fig. 3 (cont.)

Human tumor necrosis factor-beta (TNFB) gene, complete cds.

ACCESSION M55913

VERSION M55913.1 GI:339742

```

1 ccgacctaga acccgccgcg gcctgccac gctgccactg ccgcttctc tataaagga
   61 cctgagcgtc cggggccagg ggctccgcac agcaggtag gctctctgc cccatctct
  121 tgggctgccc gtgctctgt cttggacta cggcccgca gtgtctgcc ctctgcctg
  181 gcctgggtcc ctctgcacc tgcgtctgg atccccggcc tgcctgggccc tgggccttg
  241 tgggtttgt tttggttcc ttctgtct ctgactctcc atctgtcagt ctattgtct
  301 ctgtcacaca ttctgttt ctgcatgat tctctctgt tcccttctg tctctctgt
  361 tctccctctg ctacattgg ggtttctgt actgcatct gtcccttct ctgtcatct
  421 ctctctcggg ggtcgggggg tgcgtctcc cagggcggga ggtcgtctt ccgccgcgtg
  481 ccccgcccg ctactgtct ctctctct ctctttct ctgcaggttc tcccatgac
  541 accacctgaa cgtctctcc tccaagggt gtgtggcacc accctacacc tctcttct
  601 ggggctgctg ctggttctgc tgcctggggc ccaggtagag cagcaggaga atgggggctg
  661 ctggggtggc tcagccaaac ctgagccct agagccccc tcaactctgt tctccctag
  721 gggctccctg gtgtggcct cacacctca gctgccaga ctgccgtca gcacccaag
  781 atgcatctg cccacagcac cctcaaact gctgtcacc tcattggtaa acatccact
  841 gacctccag acatgtccc accagctct ctctacccc tgcctcagga acccaagcat
  901 ccacctctt ccccaactt ccccaagct aaaaaaaca gagggagccc actcctatg
  961 ctccccctgc catccccag gaactcagt gtctagtgcc cacttctca gggattgaga
 1021 cctctgatcc agacctga tctccaccc ccatccccta tggctctcc taggagacc
 1081 cagcaagcag aactactgc tctggagagc aaacacggac cgtgcctcc tccaggatgg
 1141 tttctcttg agcaacaatt ctctctggt cccaccagt ggcattact tctctactc
 1201 ccagggtggt ttctctgga aagcctact tccaaggcc cctctctcc cactctacct
 1261 ggcccatgag gtccagctt tctctccca gtacccctt catgtgctc tctcagctc
 1321 ccagaagatg gtgtatccag ggctgcagga accctggctg cactcagat accacggggc
 1381 tgcgttcag ctacccagg gagaccagt atccaccac acagatggca tccccacct
 1441 agtctcagc ctagtactg tcttcttg agcctcgt ctgtagaact tggaaaaatc
 1501 cagaaagaaa aaataattga ttcaagacc ttctcccat tctgcctcca ttctgacct
 1561 ttacggggtc gtcaccact ctctttggc cattcaaca gctcaagtct tccctgatc
 1621 agtcaccgga gctttcaaag aaggaattct aggcattcca ggggaccaca cctccctgaa
 1681 ccatccctga tctctgtg gctgaggatt tcaagcctgc cttaggaatt ccagccaaa
 1741 gctgttggtc ttgtccacca gctaggtgg gcttagatcc acacacagag gaagagcagg
 1801 cacatggagg agcttggggg atgactagag gcaggagggg gactatttat gaaggcaaaa
 1861 aaattaaatt atttatttat ggaggatgga gagaggggaa taatagaaga acatccaagg
 1921 agaaacagag acaggcccaa gagatgaaga gtgagagggc atgcgcacaa ggctgaccaa
 1981 gagagaaaga agtaggcatg agggatcaca gggcccccaga aggcagggaa aggctctgaa
 2041 agccagctgc cgaccagagc cccacacgga ggcatctgca cctctgatga agcccaataa
 2101 acctctttc tctgaaatgc tctgtctg tctgtgtgtg

```

Fig. 3 (cont.)

Homo sapiens interleukin 1, beta (IL1B), mRNA.

ACCESSION NM_000576

VERSION NM_000576.2 GI:27894305

1 accaaacctc ttgaggcac aaggcacaac aggcgtctct gggattctct tcagccaatc

61 ttcatgtctc aagtgtctga agcagccatg gcagaagtac ctgagctcgc cagtgaatg

121 atggcttatt acagtggcaa tgaggatgac ttgtctttg aagctgatgg ccctaaacag

181 atgaagtgtc cctccagga cctggacctc tgcctctgg atggcgccat ccagctacga

241 atctccgacc accactacag caagggcttc aggcaggccg cgtcagttgt tgtggccatg

301 gacaagctga ggaagatgct ggttccctgc ccacagacct tccaggagaa tgacctgagc

361 acctctttc ccttcattt tgaagaagaa cctatctct tcgacacatg ggataacgag

421 gcttatgtgc acgatgcacc tgtacgatca ctgaactgca cgctccggga ctacagcaa

481 aaaagcttg tgatgtctgg tccatatgaa ctgaaagctc tccacctcca gggacaggat

541 atggagcaac aagtgggtgt ctccatgtcc ttgtacaag gagaagaaag taatgacaaa

601 atacctgtgg ccttggccct caaggaaaag aatctgtacc tgtcctgcgt gttgaaagat

661 gataagccca ctctacagct ggagagtgtg gatcccaaaa attacccaaa gaagaagatg

721 gaaaagcgat ttgtctcaa caagatagaa atcaataaca agctggaatt tgagtctgcc

781 cagttcccca actggtacat cagcacctct caagcagaaa acatgcccggt ctctctggga

841 gggaccaaa ggcggccagga tataactgac ttaccatgc aatttgtgtc ttctaaaga

901 gagctgtacc cagagagtcc tgtgtgaat gtggactcaa tccctagggc tggcagaaag

961 ggaacagaaa ggttttgag tacggctata gcttgactt tctgtgtc tacaccaatg

1021 cccaactgcc tgccttaggg tagtgctaag aggatctct gtccatcagc caggacagtc

1081 agctctctcc tticagggcc aatccccagc cttttgtg agccaggcct ctctacctc

1141 tctactcac taaagcccc cctgacagaa accacggcca catttggttc taagaaaccc

1201 tctgtcattc gctccacat tctgatgagc aaccgctcc ctatttatt atttattgt

1261 ttgtttgtt tattcattgg tctaattat tcaaaggggg caagaagtag cagtgtctgt

1321 aaaagagcct agttttaat agctatggaa tcaattcaat ttggactggt gtgtctctt

1381 taaatcaagt ccttaatta agactgaaaa tatataagct cagattattt aaatgggaat

1441 attataaat gagcaaatat catactgttc aatgggtctg aaataaactt cactgaag

Homo sapiens interleukin 1, alpha (IL1A), mRNA.

ACCESSION NM_000575

VERSION NM_000575.3 GI:27894329

1 accaggcaac accattgaag gctcatatgt aaaaatccat gccttcctt ctccaatct

61 ccatcccaa acttagccac tggcttctgg ctgaggcctt acgcatacct cccggggcct

121 gcacacacct tctctacag aagacacacc ttgggcata cctacagaag accaggcttc

181 tctctgtcc ttgtagagg gctactttac tgtaacaggg ccagggtgga gagttctctc

241 ctgaagctcc atcccccta taggaaatgt gttgacaata ttcagaagag taagaggatc

301 aagacttctt tgtgtcaaaa taccactgtt ctctctcta cctgcccta accaggagct

Fig. 3 (cont.)

361 tgcacccca aactctgagg tgatttatgc cttaatcaag caaacttccc tcttcagaaa
 421 agatggctca tttccctca aaagtgcca ggagctgcca agtattctgc caattcaccc
 481 tggagcacia tcaacaaatt cagccagaac acaactacag ctactattag aactattatt
 541 attaataaat tctctccaa atctagcccc ttgactcgg atttcacgat ttctccctc
 601 ctctagaaa ctigataagt ttccgcgct tcccttttc taagactaca tgtttgcat
 661 ctataaagc aaaggggtga ataaatgaac caaatcaata acttctggaa tatctgcaa
 721 caacaataat atcagctatg ccatcttca ctattttagc cagtatcgag ttgaatgaac
 781 atagaaaaat acaaaactga attctccct gtaaattccc cgtttgacg acgcactgt
 841 agccacgtag ccacgcctac ttaagacaat tacaaaaggc gaagaagact gactcaggct
 901 taagctgcca gccagagagg gactcatttc attggcgtt gagtcagcaa agaagtcaag
 961 atggccaaag ttccagacat gttgaagac ctgaagaact gttacagtga aaatgaagaa
 1021 gacagttct ccatgtatca tctgtctcg aatcagaaat ccttctatca tgtaagctat
 1081 ggccactcc atgaaggctg catggatcaa tctgtgtctc tgagtatctc tgaacacctc
 1141 aaaacatcca agcttacctt caaggagagc atgggtgtag tagcaaccaa cgggaagggt
 1201 ctgaagaaga gacggttag ttaagccaa tccatcactg atgatgacct ggaggccatc
 1261 gccaatgact cagaggaaga aatcatcaag cctaggtcag caccttttag ctctctgagc
 1321 aatgtgaaat acaactttat gaggatcatc aaatacgaat tcactctgaa tgacgccctc
 1381 aatcaaagta taattcgagc caatgatcag tacctcacgg ctgctgcatt acataatctg
 1441 gatgaagcag tgaaattga catgggtgct tataagtcac caaaggatga tgctaaaatt
 1501 accgtgattc taagaatctc aaaaactcaa ttgtatgtga ctgcccaaga tgaagaccaa
 1561 ccagtgtgc tgaaggagat gcctgagata cccaaaacca tcacaggtag tgagaccaac
 1621 ctctcttct tctgggaaac tcacggcact aagaactatt tcacatcagt tgcccatcca
 1681 aactgttta ttgccacaaa gcaagactac tgggtgtgct tggcaggggg gccaccctc
 1741 atcactgact tttagatact ggaaaaccag gcgtaggctt ggagtctcac ttgtctcact
 1801 tgtgcagtg tgacagttca tatgtacat gtacatgaag aagctaaatc ctttactgt
 1861 agtcatttgc tgagcatgta ctgagccttg taattctaaa tgaatgttta cactctttgt
 1921 aagagtgga ccaacactaa catataatgt tgtatttaa agaaccacct atatttgca
 1981 tagtaccaat cattttaatt attattctc ataacaatt taggaggacc agagctactg
 2041 actatggcta ccaaaaagac tctaccata ttacagatgg gcaaattaag gcataagaaa
 2101 actaagaaat atgcacaata gcagtgaaa caagaagcca cagacctagg atttcatgat
 2161 ttcatctcaa ctgtttgcct tctacttta agttgctgat gaactctaa tcaaatagca
 2221 taagtttctg ggacctcagt ttatcattt tcaaaatgga gggataata cctaagcctt
 2281 cctgccgcaa cagttttta tgctaatcag ggaggtcatt ttggtaaaa acttcttgaa
 2341 gccgagcctc aagatgaagg caaagcacga aatgttattt ttaattatt atttatatat
 2401 gtatttataa atatttttaa gataattata atatactata ttatgggaa ccccttcac
 2461 ctctgagtgt gaccaggcat cctccacaat agcagacagt gtttctggg ataagtaagt
 2521 ttgatttcat taatacaggc cattttgtc caagttgtc ttatccata gccaggaaac
 2581 tctgacttct agtactggg agacctgaa tcatataata aatgtacatt aattacctg
 2641 agccagtaat tggccgato ttgactctt ttgccattaa acttacctg gcattctgt

Fig. 3 (cont.)

2701 ttcaattcca cctgcaatca agtcctacaa gctaaaatta gatgaactca accttgacaa
 2761 ccatgagacc actgttatca aaactttctt ttctggaatg taatcaatgt ttcttctagg
 2821 ttctaaaaat tgtgatcaga ccataatgtt acattattat caacaatagt gattgataga
 2881 gtgttatcag tcataactaa ataaagcttg caacaaaatt ctctgacaaa aaaaaaaaaa
 2941 aaa

Homo sapiens interleukin 2 (IL2), mRNA.

ACCESSION NM_000586

VERSION NM_000586.2 GI:28178860

1 cgaattcccc tatcacctaa gtgtgggcta atgtaacaaa gagggatttc acctacatcc
 61 attcagtcag tcttggggg tttaaagaaa ttcaaagag tcatcagaag aggaaaaatg
 121 aaggtaatgt ttttcagac aggtaaagtc ttgaaaata tgtgtaatat gtaaacatt
 181 ttgacacccc cataatattt ttccagaatt aacagtataa attgcatctc ttgtcaaga
 241 gtccctatc actctcttta atcactactc acagtaacct caactcctgc cacaatgtac
 301 aggatgcaac tctgtcttg cattgcacta agtcttgac ttgcacaaa cagtgcacct
 361 acttcaagtt ctacaaagaa aacacagcta caactggagc atttactgct ggatttacag
 421 atgattttga atggaattaa taattacaag aatcccaaac tcaccaggat gtcacattt
 481 aagttttaca tgcccaagaa ggccacagaa ctgaaacatc ttcagtgtct agaagaagaa
 541 ctcaaacctc tggaggaagt gctaaattta gctcaaagca aaaactttca ctaagaccc
 601 agggacttaa tcagcaatat caacgtaata gttctggaac taaagggatc tgaacaaca
 661 ttcatgtgtg aatatgctga tgagacagca accattgtag aatttctgaa cagatggatt
 721 acctttgtc aaagcatcat ctcaacactg acttgataat taagtgtctc ccacttaaaa
 781 catatcaggc cttctattta tttaaattt taaattttat atttattgtt gaatgtatgg
 841 ttgtctacct attgtaacta ttattcttaa tcttaaaact ataaatatgg atcttttatg
 901 attcttttg taagccctag gggctctaaa atggtttcac ttatttatcc caaaatattt
 961 attattatgt tgaatgttaa atatagtatc tatgtagatt ggtagtaaa actatttaat
 1021 aaatttgata aatataaaaa aaaaaaa

Homo sapiens interleukin 3 (colony-stimulating factor, multiple)
 (IL3), mRNA.

ACCESSION NM_000588

VERSION NM_000588.3 GI:28416914

1 cagagcccca cgaaggacca gaacaagaca gaggcctcc tgccgatcca aacatgagcc
 61 gcctgcccgt cctgtcctg ctccaactcc tggctcgccc cggactccaa gctcccatga
 121 cccagacaac gccctgaag acaagctggg ttaactgtc taacatgatc gatgaaatta
 181 taacacactt aaagcagcca ccttgcctt tgctggactt caacaacctc aatggggaag
 241 accaagacat tctgatggaa aataacctc gaaggccaaa cctggaggca ttcaacaggg
 301 ctgtcaagag ttacagaac gcacagcaa ttgagagcat tcttaaaaat ctctgccat

Fig. 3 (cont.)

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361 gtctgcccct ggccacggcc gcacccacgc gacatccaat ccatatcaag gacggtgact
 421 ggaatgaatt cggaggaaa ctgacgttct atctgaaaac ccttgagaat gcgcaggctc
 481 aacagacgac ttgagcctc gcgatcttt gagtccaacg tccagctcgt tctctgggcc
 541 ttctcaccac agagcctcgg gacatcaaaa acagcagaac ttctgaaacc tctgggtcat
 601 ctctcacaca ttccaggacc agaagcattt caccctttcc tgcggcatca gatgaattgt
 661 taattatcta atttctgaaa tgtgcagctc ccattiggcc ttgtgcggtt gtgttctcat
 721 tttatccca ttgagactat ttattatgt atgtatgtat ttattattt attgcctgga
 781 gtgtgaactg tatttattt agcagaggag ccatgtcctg ctgcttctgc aaaaaactca
 841 gagtggggtg gggagcatgt tcattgtac ctgaggttt aaactgggtc ctagggatgt
 901 gtgagaataa actagactct gaac

//

Homo sapiens interleukin 4 (IL4), transcript variant 2, mRNA.

ACCESSION NM_172348

VERSION NM_172348.1 GI:27477091

1 ttctatgcaa agcaaaaagc cagcagcagc cccaagctga taagattaat ctaaagagca
 61 aattatggtg taatttccta tgcagaaact ttgtagttaa tttttaaaa aggtttcatt
 121 ttctattgg tctgatttca caggaacatt ttacctgttt gtgaggcatt ttttctctg
 181 gaagagaggt gctgattggc cccaagtgac tgacaatctg gtgtaacgaa aatttccaat
 241 gtaaaactcat ttccctcctg ttccagcaat tttaaactca tatatagaga tatctttgtc
 301 agcattgcat cgtttagctc tctgataaa ctaattgcct cacattgtca ctgcaaactg
 361 acacctatta atgggtctca cctcccaact gcttccccct ctgttcttcc tgctagcatg
 421 tgccggcaac ttgtccacg gacacaagtg cgatatcacc ttacaggaga tcatcaaaac
 481 ttgaacagc ctacagagc agaagaacac aactgagaag gaaaccttct gcagggtctg
 541 gactgtgctc cggcagttct acagccacca tgagaaggac actcgtctgc tgggtgcgac
 601 tgcacagcag ttccacaggc acaagcagct gatccgattc ctgaaacggc tcgacaggaa
 661 cctctggggc ctggcgggct tgaattcctg tctgtgaag gaagccaacc agagtacgtt
 721 ggaaaactc ttggaaaggc taaagacgat catgagagag aaatatcaa agtgttcgag
 781 ctgaataatt taattatga gttttgata gctttattt ttaagtattt atatatttat
 841 aactcatcat aaaataaagt atatatagaa tct

//

Homo sapiens interleukin 4 (IL4), transcript variant 1, mRNA.

ACCESSION NM_000589

VERSION NM_000589.2 GI:27477090

1 ttctatgcaa agcaaaaagc cagcagcagc cccaagctga taagattaat ctaaagagca
 61 aattatggtg taatttccta tgcagaaact ttgtagttaa tttttaaaa aggtttcatt
 121 ttctattgg tctgatttca caggaacatt ttacctgttt gtgaggcatt ttttctctg
 181 gaagagaggt gctgattggc cccaagtgac tgacaatctg gtgtaacgaa aatttccaat
 241 gtaaaactcat ttccctcctg ttccagcaat tttaaactca tatatagaga tatctttgtc

Fig. 3 (cont.)

301 agcattgcat cgtagcttc tctgataaa ctaattgcct cacattgtca ctgcaaactg
 361 acacctatta atgggtctca cctcccaact gcttccccct ctgttctcc tgctagcatg
 421 tgccggcaac ttgtccacg gacacaagtg cgatacacc ttacaggaga tcatcaaaac
 481 ttgaacagc ctacagagc agaagactct gtgcaccgag ttgaccgtaa cagacatctt
 541 tgctgcctcc aagaacacaa ctgagaagga aaccttctgc agggctgcga ctgtgctccg
 601 gcagttctac agccaccatg agaaggacac tcgtgcctg ggtgcgactg cacagcagtt
 661 ccacaggcac aagcagctga tccgattcct gaaacggctc gacaggaacc tctggggcct
 721 ggcgggcttg aattcctgtc ctgtgaagga agccaaccag agtacgttg aaaacttct
 781 ggaaaggcta aagacgatca tgagagagaa atattcaaag tgttcgagct gaatatttta
 841 atttatgagt ttgtgatagc ttatttttt aagtatttat atattataa ctcatcataa
 901 aataaagtat atatagaatc t

Human interleukin 5 (IL-5) gene, complete cds.

ACCESSION J03478

VERSION J03478.1 GI:186338

1 atcctaatac agacccagc gaacagaact cgacctgcc aaggctggc atttccattt
 61 caatcactgt ctccacca gtatttcaa ttcttttaa gacagattaa tctagccaca
 121 gtcatagtag aacatagccg atctgaaaa aaaacattcc caatatttat gtattttagc
 181 ataaaattct gtttagtgt ctacctata ctgttttg cacacatctt ttaagaggaa
 241 gtaatttct tgattttaag aaatgcaaat gtggggcaat gatgtattaa ccaaagatt
 301 cctccgtaa tagaaaatgt tttaaaggg gggaaacagg gatttttatt attaaaagat
 361 aaaagtaaat ttatttttta agatataagg cattggaaac atttagtttc acgatatgcc
 421 attattagc attctctatc tgattgttag aaattattca ttcttcaaa gacagacaat
 481 aaattgactg gggacgcagt ctgtactat gcacttctt tgccaaaggc aaacgcagaa
 541 cgtttcagag ccatgaggat gcttctgcat ttgagttgc tagctctgg agctgcctac
 601 gtgtatgcca tccccacaga aattcccaca agtgcattgg tgaaagagac ctggcactg
 661 ctcttactc atcgaactct gctgatagcc aatgaggtaa ttctttat gattctaca
 721 gtctgtaaag tgcataaggta atcattgtg atggttcct tactatata agagatctgt
 781 tataaataat aagattctga gcacattagt acatgggtga taactacatc accagcaaac
 841 attctgttaa aagttatgaa tgctgggtg ctgtaaaaat gattgtattt ctttctct
 901 ccagactctg aggattcctg ttctgtaca taaaatgta agttaaatg tgattcagta
 961 aaatgatggc atgaataagt aaatttctg tttaagctg taaatcatta gttatcattg
 1021 gaactattta attttcata ttgttttc atatgggtg ctgtaatgt ctgtacttat
 1081 aaatatgagg aatgacttt tatcaagtag aatcctttaa acaagtggat taggctctt
 1141 ggtgatgtg ttagtgtcc tcccaaaga gcatcgtgc aggattctt ccagaaggat
 1201 tccacactga gtgagagtg cgtgctagtc tccgtgcagt tctgactctt tctactcta
 1261 acgtgttct gaaagtatta gcaactcaga attatattt tagaaccatg atcagtagac
 1321 attaaaatat ataacaaatg ccctatatta ataattctgc atacttaaat aattatgact

Fig. 3 (cont.)

1381 atatgatggt gtgtatgcat tgaatatgcc tggcatatt aaaatgtaaa atatagtt
 1441 tattagtcta aatagaataa aactaccagc tagaactgta gaaacacatt gatatgagtt
 1501 taatgtataa tgcattacac ttcaaaaaca tttttcca gttacataat taagtatat
 1561 cctttataaa actcctcagt aatcatataa gcttcactca cttttgaaa atttatctt
 1621 aatatgtggt ggtttgtgc ctgaaaaca acaaaaaaac tcttggaga agggaactca
 1681 tgtaaatacc acaaaacaaa gcctaacttt gtggaccaa atgttttaa taattatctt
 1741 ttaattgatg aattaaag tatatatatt tattgtgtac aatatgatgt ttgaagtat
 1801 gtatacattg cagaatggac aatggaccaa attttatac ctgtcttga ttattgcat
 1861 ttaaaaaatt ttctcattt agcaccaact gtgcactgaa gaaatcttc agggaatagg
 1921 cacactggag agtcaaacgt tgcaaggggg tactgtggaa agactatca aaaactgtc
 1981 ctaataaag aaatacattg acggccaaaa agtaagtac acacattcaa tggaagctat
 2041 attgtcctg gctgtgccta ttctatgga atgacagtt tctgtata cctattgtca
 2101 ttttcttt ttacagaaa aagtggtgag aagaaagacg gagagtaa acattcctag
 2161 actacctgca agagttctt ggtgtaata acaccgagtg gataatagaa agttgagact
 2221 aaactggtt gttgcagcca aagatttgg aggagaagga catttactg cagtgagaat
 2281 gagggccaag aaagagtcag gccttaatt tcaatataa ttaactcag agggaaagta
 2341 aatattcag gcatactgac actttgccag aaagcataaa attctaaaa tatattcag
 2401 atacagaat cattgaagta ttctctcca ggcaaaattg atatacttt ttctattta
 2461 acttaacatt ctgtaaatg tctgtaact taatagtatt tatgaaatgg ttaagaattt
 2521 ggtaaatag tatttattta atgtatgtt gtgttctaat aaaacaaaa tagacaactg
 2581 ttaatttgc tgctggcctc tgctctagc aattgaagt tagcacagtc cattgagtac
 2641 atgccagtt tggaggaagg gtctgagcac atgtggctga gcatcccat ttctctgag
 2701 aagtcctaa gttgcaaggc acaccagagg tggaagtgt ctgacaggac ttagtggga
 2761 tgtggggagc agggacacag gcaggagggt aacctggtt tctcttaca gtatatccag
 2821 aacctgggt ggtcgaaggg taaatggtag ggaataaatg aatgaatgtc gttccaaga
 2881 tgattgtaga actaaaatga gttgtaagct cccctggaag aagggtgtg gaacctgtaa
 2941 ctaggttct gccagcctg tgagaagaat ttggcagatc atctcattgc cagtatagag
 3001 aggaagccag aaacctctc tgccaaggcc tgcaggggt cttaccacct gacctgcac
 3061 cataaaaaa ggacagagag acatggtagg gcagtccat tagaaagact gattccgta
 3121 ttccggggc agggcagcac caggccgcac aacatccatt ctgcctgct atggctatca
 3181 gtagcatcac tagagattct tctgttgag aaaactctc tcaaggatcc

//

Homo sapiens interleukin 6 (interferon, beta 2) (IL6), mRNA.

ACCESSION NM_000600

VERSION NM_000600.1 GI:10834983

1 ttctgcctc gagccaccg ggaacgaaag agaagctcta tctgcctcc aggagcccag

61 ctatgaactc cttctccaca agcgccttcg gtccagttgc cttctccctg gggctgctcc

121 tgggtgtgcc tgctgcctc cctgccccag taccgccagg agaagattcc aaagatgtag

181 ccgccccaca cagacagcca ctacactctt cagaacgaat tgacaaacaa attcggtaca

Fig. 3 (cont.)

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241 tcctcgacgg catctcagcc ctgagaaagg agacatgtaa caagagtaac atgtgtgaaa
 301 gcagcaaaga ggcactggca gaaaacaacc tgaaccttc aaagatggct gaaaaagatg
 361 gatgctcca atctggattc aatgaggaga ctgacctggg gaaaatcatc actggtcttt
 421 tggagttga ggtataccta gagtaccicc agaacagatt tgagagtagt gaggaacaag
 481 ccagagctgt gcagatgagt acaaaagtcc tgatccagtt cctgcagaaa aaggcaaaga
 541 atctagatgc aataaccacc cctgacccaa ccacaaatgc cagcctgctg acgaagctgc
 601 aggcacagaa ccagtggctg caggacatga caactcatct cattctgcgc agctttaagg
 661 agttctgca gtccagcctg agggctcttc ggcaaatgta gcatgggcac ctgagattgt
 721 tgtgttaat gggcattcct tctctggtc agaaacctgt ccactgggca cagaacttat
 781 gttgttctct atggagaact aaaagtatga gcgttaggac actattttaa ttatttttaa
 841 ttattaata tttaaatatg tgaagctgag ttaatttatg taagtcatat ttatattttt
 901 aagaagtacc acttgaacaa tttatgtat tagttttgaa ataataatgg aaagtggcta
 961 tgcagttga atatccttg ttcagagcc agatcattc ttggaaagt taggcttacc
 1021 tcaaataaat ggctaactta tacatattt taaagaaata ttatatgtt atttatataa
 1081 tgtataaatg gttttatc caataaatgg cattttaaaa aattc

Homo sapiens interleukin 7 (IL7), mRNA.

NM_000880

VERSION NM_000880.2 GI:28610152

1 acatccgagg caacgcctcc ttggtgtcgt ccgcttcaa taaccagct tgcgtcctgc
 61 acactgtgg ctccgtgca cacattaaca actcatggtt ctgctccca gtcgccaagc
 121 gttccaagg cgttgagaga tcatctggga agtctttac ccagaattgc ttgattcag
 181 gccagctggt tttctgctg gtgattcgga aattcgcgaa ttctctggt cctcatccag
 241 gtgcgcggga agcagggtgc caggagagag gggataatga agattccatg ctgatgatcc
 301 caaagattga acctgcagac caagcgcaaa gtagaaactg aaagtacact gctggcggat
 361 cctacggaag ttatggaaaa ggcaaagcgc agagccacgc cgtagtgtgt gccgcccccc
 421 ttgggatgga tgaaactgca gtcgcggcgt gggtaagagg aaccagctgc agagatcacc
 481 ctgccaaca cagactcggc aactccgcgg aagaccaggg tcctgggagt gactatgggc
 541 ggtgagagct tgcctctgct ccagttgcgg tcatcatgac tacgcccgcc tcccgcagac
 601 catgttccat gttctttta ggtatattt tggacttct cccctgatcc ttgtctgtt
 661 gccagtagca tcatctgatt gtgatattga aggtaaagat ggcaacaat atgagagtgt
 721 tctaattggt agcatcgatc aattattgga cagcatgaaa gaaattggta gcaattgcct
 781 gaataatgaa tttaactttt ttaaaagaca tatctgtgat gctaataagg aaggtatgtt
 841 ttattccgt gctgctcgca agttgaggca atttcttaaa atgaatagca ctggtgattt
 901 tgatctccac ttattaaaag ttcagaagg cacaacaata ctgttgaact gcactggcca
 961 ggtaaaagga agaaaaccag ctgccctggg tgaagcccaa ccaacaaga gtttgaaga
 1021 aaataaatct taaaggaac agaaaaaact gaatgacttg tgttcttaa agagactatt
 1081 acaagagata aaaacttgtt ggaataaaat ttgatgggc actaaagaac actgaaaaat
 1141 atggagtggc aatatagaaa cacgaacttt agctgcatcc tccaagaatc tatctgctta

Fig. 3 (cont.)

1201 tgcagtttt cagagtggaa tgctcctag aagtactga atgcacatg gtcaaaacgg
 1261 attagggcat ttgagaaatg catattgtat tactagaaga tgaatacaaa caatggaaac
 1321 tgaatgctcc agtcaacaaa ctatttcta tatatgtgaa cattatcaa tcagtataat
 1381 tctgtactga ttttgaag acaatccatg taaggatca gttgcaataa tacttctcaa
 1441 acctgttta atatttcaag acattaaatc tatgaagat ataatggttt caaagattca
 1501 aaattgacat tgcttactg tcaaaataat ttatggctc actatgaatc tattatactg
 1561 tattaagagt gaaaattgtc ttcttctgtg ctggagatgt tttagagtta acaatgatat
 1621 atggataatg ccggtgagaa taagagagtc ataacctta agtaagcaac agcataacaa
 1681 ggccaagat acctaaaaga gatttcaaga gatttaatta atcatgaatg tgtaacacag
 1741 tgccttcaat aaatggata gcaaatgttt tgacatgaaa aaaggacaat ttcaaaaaaa
 1801 taaaataaaa taaaataaaa ttacctagt ctaaggatgc taaaccttag tactgagtta
 1861 cattgtcatt tatatagatt ataactgtc taaataagtt tgcaatttgg gagatatatt
 1921 ttaagataa taatatatgt ttaccttta attaataaaa tatctgtatt taattttgac
 1981 actatatctg tatataaaat atttcatac agcattacaa attgcttact ttggaataca
 2041 ttctccttt gataaaataa atgagctatg tattaacaaa aaaaaaaaaa aaaaaaaaaa
 2101 aaaaaaaaaa aaaaaa

Homo sapiens interleukin 8 (IL8), mRNA.

ACCESSION NM_000584

VERSION NM_000584.2 GI:28610153

1 ctccataagg cacaaacttt cagagacagc agagcacaca agcttctagg acaagagcca
 61 ggaagaaacc accggaagga accatctcac tgtgtgtaa catgacttcc aagctggccg
 121 tggctctctt ggcagccttc ctgatttctg cagctctgtg tgaagggtga gttttgcaa
 181 ggagtgtcaa agaacttaga tgtcagtga taaagacata ctccaaacct ttccaccca
 241 aatttatcaa agaactgaga gtgattgaga gtggaccaca ctgcgccaac acagaaatta
 301 ttgtaaagct ttctgatgga agagagctct gtcctggacc caaggaaaac tgggtgcaga
 361 ggggtgtgga gaagttttg aagagggtg agaattcata aaaaaattca ttctctgtg
 421 tatccaagaa tcagtgaaga tgccagtga acttcaagca aatctacttc aacacttcat
 481 gtattgtgtg ggtctgtgt aggggtgcca gatgaatac aagattcctg gttaaattg
 541 aatttcagta aacaatgaat agttttcat tglaccatga aatatccaga acatacttat
 601 atgtaaagta ttatttatt gaattacaa aaaacaacaa ataattttta aatataagga
 661 ttctctaga tattgcacgg gagaatatac aaatagcaaa attgaggcca agggccaaga
 721 gaatatccga actttaatt caggaattga atgggttgc tagaatgtga tattgaagc
 781 atcacataaa aatgatggga caataaatt tgccataaag tcaaatttag ctggaaatcc
 841 tggattttt tctgtaaat ctggcaacc tagtctgcta gccaggatcc acaagtcctt
 901 gtccactgt gccttggtt ctctttatt tctaagtga aaaagtatta gccaccatct
 961 tacctcacag tgatgtgtg aggacatgtg gaagcacttt aagtttttc atcataacat
 1021 aaattattt caagtgaac ttattaacct atttattatt tatgtattta ttaagcatc
 1081 aaatattgt gcaagaattt ggaaaaatag aagatgaatc attgattgaa tagttataa

Fig. 3 (cont.)

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1141 gatgttatag taaattatt ttattttaga tattaaatga tgtttatta gataaatttc
 1201 aatcaggggt tttagattaa acaaacaac aattgggtac ccagttaaattttcatttca
 1261 gataaacaac aaataatttt ttagtataag tacattattg ttatctgaa attttaattg
 1321 aactaacaat cctagttga tactcccagt ctgtcattg ccagctgtgt tggtagtgct
 1381 gtgtgaatt acggaataat gagttagaac tattaaaaca gccaaaactc cacagtcaat
 1441 attagtaatt tctgtcgggt tgaaactgt ttattatgta caaatagatt ctataatat
 1501 tatttaaatg actgcatttt taaatacaag gctttatatt tttaacttta agatgttttt
 1561 atgtgctctc caaatttttt ttactgttcc tgattgtatg gaaatataaa agtaaatatg
 1621 aaacatttaa aatataattt gttgtcaaag taaaaaaaaa aaaaaa

Homo sapiens interleukin 9 (IL9), mRNA.

ACCESSION NM_000590

VERSION NM_000590.1 GI:10834979

1 ccgctgtcaa gatgtctctg gccatggtcc ttacctctgc cctgctcctg tgctccgtgg
 61 caggccaggg gtgtccaacc ttggcgggga tcttgacat caacttcctc atcaacaaga
 121 tgcaggaaga tccagcttcc aagtgccact gcagtgtcaa tggaccagt tgtctctgtt
 181 tgggcattcc ctctgacaac tgcaccagac catgcttcag tgagagactg tctcagatga
 241 ccaataccac catgcaaaca agataccac tgattttcag tcgggtgaaa aaatcagttg
 301 aagtactaaa gaacaacaag tgtccatatt ttctctgtga acagccatgc aaccaaacca
 361 cggcaggcaa cgcgtgaca ttctgaaga gtctctgga aattttccag aaagaaaaga
 421 tgagagggat gagaggcaag atatgaagat gaaatattat ttatcttatt tattaaattt
 481 aaaaagcttt ctcttaagt tgcataaatt taaaaatcaa gtaagctact ctaaatcagt
 541 atcagttgtg attatttgtt taacattgta tgtctttatt ttgaaataaa t

Homo sapiens interleukin 10 (IL10), mRNA.

ACCESSION NM_000572

VERSION NM_000572.2 GI:24430216

1 acacatcagg ggcttgctct tgcaaaacca aaccacaaga cagacttgca aaagaaggca
 61 tgcacagctc agcactgctc tgttgcttgg tctctctgac tggggtgagg gccagcccag
 121 gccagggcac ccagtctgag aacagctgca cccactccc aggcaacctg cctaacatgc
 181 ttcgagatct ccgagatgcc ttcagcagag tgaagacttt cttcaaatg aaggatcagc
 241 tggacaactt gttgttaaag gagiccttgc tggaggactt taagggttac ctgggttgcc
 301 aagccttctc tgagatgatc cagttttacc tggaggaggt gatgccccaa gctgagaacc
 361 aagaccaga catcaaggcg catgtgaact ccctggggga gaacctgaag accctcaggo
 421 tgaggctacg gcgctgtcat cgatttctc cctgtgaaaa caagagcaag gccgtggagc
 481 aggtgaagaa tgcctttaat aagctccaag agaaaggcat ctacaaagcc atgagtgagt
 541 ttgacatct catcaactac atagaagcct acatgacaat gaagatacga aactgagaca
 601 tcagggtggc gactctatag actctaggac ataaattaga ggtctccaaa atcggtatctg

Fig. 3 (cont.)

661 gggctctggg atagctgacc cagccccttg agaaacctta ttgtacctct ctatagaat
 721 atttattacc tctgatacct caaccccat ttctatttat ttactgagct tctctgtgaa
 781 cgatttagaa agaagcccaa tattataatt ttttcaata ttattattt tcacctgtt
 841 ttaagctgtt tccatagggt gacacactat ggtattgag tgtttaaga taaattataa
 901 gttacataag ggaggaaaaa aaatgttctt tggggagcca acagaagctt ccattccaag
 961 cctgaccacg ctttctagct gttgagctgt ttccctgac ctccctctaa ttatcttgt
 1021 ctctgggctt ggggcttct aactgctaca aatactctta ggaagagaaa ccaggagacc
 1081 ccttgatga ttaattcacc ttccagtgc tcggagggat tcccctaacc tcattccca
 1141 accacttcat tctgaaagc tgggccagc ttgtattta taacaacctt aatttggtc
 1201 taggcggggc gcggtggctc acgctgttaa tccagcact tgggaggct gagcggggtg
 1261 gatcactga ggtcaggagt tctaaccag cctggtaac atggtgaaac cccgtctcta
 1321 ctaaaaaatc aaaaattagc cgggcatggt ggcgcgacc tgtaatcca gctactggg
 1381 aggctgaggc aagagaattg cttgaaccca ggagatggaa gttgcagtga gctgatatca
 1441 tgcccctgta ctccagcctg ggtgacagag caagactctg tctcaaaaaa taaaaataa
 1501 aataaatttg gttctaag aactcagtt taactagaat ttattcaatt cctctgggaa
 1561 tgttacattg ttgtctgic ttcatagcag attttaatt tgaataaata aatgtatctt
 1621 attcacatc

Homo sapiens interleukin 12A (natural killer cell stimulatory
 factor 1, cytotoxic lymphocyte maturation factor 1, p35) (IL12A),
 mRNA.

1 ttctatttg ggccgagctg gaggcggcgg ggccgtcccg gaacggctgc ggccgggcac
 61 cccgggagtt aatccgaaag cgccgcaagc cccgcgggcc ggccgcaccg cacgtgtcac
 121 cgagaagctg atgtagagag agacacagaa ggagacagaa agcaagagac cagagtcccg
 181 ggaaagtctt gccgcgctc gggacaatta taaaatgtg gcccctggg tcagcctccc
 241 agccaccgcc ctacctgcc gcgccacag gctgcatcc agcggctcg cctgtgtccc
 301 tgcagtgcg gctcagcatg tgtccagcgc gcagcctct cctgtggct accctgttcc
 361 tcttgacca cctcagttg gccagaaacc tcccgtggc cactccagac ccaggaatgt
 421 tccatgcct tcaccactcc caaacctgc tgagggccgt cagcaacatg ctccagaagg
 481 ccagacaaac tctagaattt taccctgca ctctgaaga gattgatcat gaagatatca
 541 caaaagataa aaccagcaca gtggaggcct gttaccatt ggaattaacc agaatagaga
 601 gttgcctaaa ttccagagag acctcttca taactaatgg gagtgctg gcctccagaa
 661 agaccttt tatgatggcc ctgtgcctta gtagtatta tgaagacttg aagatgtacc
 721 aggtggagtt caagaccatg aatgcaaagc ttctgatgga tctaagagg cagatcttc
 781 tagatcaaaa catgctggca gttattgatg agctgatgca ggccctgaat ttcaacagt
 841 agactgtgcc aaaaaatcc tccttgaag aaccggattt ttataaaact aaaatcaagc
 901 tctgcatact tcttcatgct ttcagaattc gggcagtgac tattgataga gtgatgagct
 961 atctgaatgc ttctaataaa gcgagggtccc tccaaaccgt tgcattttt ataaaactt

Fig. 3 (cont.)

1021 gaaatgagga aactttgata ggatgtggat taagaactag ggagggggaa agaaggatgg
1081 gactattaca tccacatgat acctctgac aagtatttt gacatttact gtggataaat
1141 tgttttaag tttcatgaa tgaattgcta agaagggaaa atatccatcc tgaagggtgt
1201 ttcatcac ttaatagaa gggcaaatat ttataagcta ttctgtacc aaagtgttg
1261 tggaacaaaa catgtaagca taacttattt taaaatattt atttatataa ctggtaatc
1321 atgaaagcat ctgagctaac ttatattat ttatgttata ttattaaat tattatcaa
1381 gtgtattga aaaatattt taagtgttct aaaaataaaa gtattgaatt aaagtgaaaa
1441 aaaa

Homo sapiens interleukin 20 (IL20), mRNA.

ACCESSION NM_018724

VERSION NM_018724.2 GI:31083165

1 cttgaattc ctgctcctg tggctccag attcaggcc taagatgaaa gcctctagtc
61 ttgcctcag cctctctct gctgcgttt atctctatg gactcctcc actggactga
121 agacactcaa ttgggaagc tgtgtgatcg ccacaaacct tcaggaaata cgaaatggat
181 ttctgagat acggggcagt gtgcaagcca aagatggaaa cattgacatc agaacttaa
241 ggaggactga gtctttgcaa gacacaaagc ctgcgaatcg atgctgcctc ctgcgccatt
301 tgctaagact ctatctggac agggattta aaaactacca gaccctgac cattatactc
361 tccggaagat cagcagcctc gccaatcct ttcttaccat caagaaggac ctccggctct
421 gtcatgccc catgacatgc cattgtgggg aggaagcaat gaagaaatac agccagattc
481 tgagtcactt tgaagagctg gaacctcagg cagcagttgt gaaggcttg ggggaactag
541 acattctct gcaatggatg gaggagacag aataggagga aagtgatgct gctgctaaga
601 atattcgagg tcaagagctc cagcttcaa tacctgcaga ggaggcatga ccccaaacca
661 ccactcttt actgtactag tctgtgctg gtcacagtg atctattta tgcattactt
721 gcttcctgc atgattgtct ttatgcatcc ccaatctaa ttgagaccat acttgataa
781 gattttgta atatcttct gctattggat atattatta gtaatatat ttattattt
841 ttgctattt aatgtattta ttttttact tggacatgaa acttlaaaaa aattcacaga
901 ttatattat aacctgacta gagca

Fig. 3 (cont.)

DEFINITION Kaposi's sarcoma-associated herpesvirus latent nuclear antigen gene, partial cds.

ACCESSION AF305694

VERSION AF305694.1 GI:11037007

```

1 agaccagatt tcccaggat ggcgccccg ggaatgcgcc tgaggtcggg acggagcacc
  61 ggcgcgcct taacgagagg aagtgtagg aaacgaaaca ggtctccga aagatgtgac
 121 ctggcgaatg acctacatct acaaccgcga aggaagcatg tgcgcgactc cgtcgacggc
 181 cgggaatgtg gacccacac ctgcctata ccaggaagtc ccacagtgtt cacatccggg
 241 ctgccagcat ttgtgtctag tcctacttta ccggtggcct ccatctctc acccgctccc
 301 gcaacacctt tacctccacc ggcactctta cccccgtaa ccacgtctc ctcccaatc
 361 cctccatccc atctgtgtc tccggggacc acggatactc attctcatc tcctgcatg
 421 ccaccacgc agtctccaga gtctctcaa aggccaccgc ttcaagtc tacaggaagg
 481 ccagactctt caacacatat gcgtccgcca cctcgcagc agactacacc tccacactca
 541 cccacgactc ctccaccga gctccctcc aagtcgtcac cagactctt agtccgtct
 601 accctgcgtg gctgagaaa aagaaggcta tcgtccccc aaggtccctc tacactaaac
 661 ccaatatgtc agtcgcccc agtctctccc cctagatgtg acttcgcaa ccgtagtgtg
 721 tccccccat gggccacaga gtccccgac tacgtgggat catccagcga tggcgatact
 781 ccgccacgcc aaccgcctac atctccatc tccataggat catcatccc gtctgagggg
 841 tctcgggtg atgacacagc catgttggtg ctcttcggg agattgcaga agaagcatcc
 901 aagaatgaaa aagaatgtc cgaataaat caggctggcg aggataatgg ggacaacgag
 961 attagcaagg aaagtcaggt tgacaaggat gacaatgaca ataaggatga tgaggaggag
1021 caggagacag atgaggagga cgaggaggat gacgaggagg atgacgagga ggatgacgag
1081 gaggatgacg aggaggatga cgaggaggat gacgaggagg atgacgagga ggatgacgag
1141 gaggatgacg aggaggatga cgaggaggat gacgaggagg atgacgagga ggaggacgag
1201 gaggaggacg aggaggagga cgaggaggag gaggacgagg aggaggagga ggacgaggag
1261 gatgacgatg atgaggacaa tgaggacgag gaggatgacg aggaggagga caagaaggag
1321 gacgaggagg acggggggcg tggaacaaa acgttgagca tccaaagtc acaacagcag
1381 caggagccac aacagcagga gccacagcag caggagccac aacagcagga gccacagcag
1441 caggagccac agcagcagga gccctgcag gagccacaac agcaggagcc acagcagcag
1501 gagccacaac agcaggagcc acagcagcag gagcccctgc aggagccaca gcagcaggag
1561 ccacagcagc aggagccaca gcagcaggag ccacaacagc aggagccaca gcagcaggat
1621 gagcagcagc aggatgagca gcagcaggat gagcagcagc aggatgagca gcagcagcag
1681 gatgagcagc agcaggatga gcagcagcag gatgagcagc agcaggatga gcaggagcag
1741 caggatgagc agcagcagga tgagcagcag cagcaggatg aacaggagca gcaggaggag
1801 caggagcagc aggaggagca ggagcaggag ttagaggagc aggagcagga gtagaggag
1861 caggagcagg agttagagga gcaggagcag gagttagagg agcaggagca ggagttagag
1921 gagcaggagc aggagttaga ggagcaggag caggagttag aggagcagga gcaggagtta
1981 gaggagcagg agcaggagt agatgagcag gagcaggagt tagaggagca ggagcaggag
2041 ttagaggagc aggagcagga gtagaggag caggagcagg agttagagga gcaggagcag
2101 gagttagagg agcaggagca ggagttagag gagcaggagc aggagttaga ggagcaggag

```

Fig. 3 (cont.)

2161 caggagttag aggagcagga gcaggagtta gaggagcagg agcaggagca ggagttagag
 2221 gaggtggaag agcaagagca ggagcaggaa gagcaggaat tagaggaggt ggaggagcaa
 2281 gagcaggagc aggaggagca ggaggagcag gagttagagg aggtggaaga gcaggaagag
 2341 caggagttag aggaggtgga agagcaggaa gagcaggagt tagaggaggt ggaagagcag
 2401 gagcagcagg ggggtggaaca gcaggagcag gagacggtg aagagcccat aatctgcac
 2461 gggctgcat ccgaggacga aatggaagtg gattacctg ttgttagcac acatgaacaa
 2521 attgccagta gccaccagg agataatata ccagacgatg acccacaacc tggcccatct
 2581 cggaataacc gctatgtact cagaacatca ccacccaca gacctggagt tcgtatgagg
 2641 cgctgccag ttaccacccc aaaaaagcca catccaagat accaacaacc accggtccct
 2701 tacagacaga tagatgattg tcctgcgaaa gctaggccac aacacatctt ttatagacgc
 2761 ttttgggaa aggatggaag acgagatcca aagtgtcaat ggaagttgc agtgatttt
 2821 tggggcaatg acccatacgg acttaaaaaa ttatctcagg ccttcagtt tggaggagta
 2881 aaggcaggcc ccgtgtcctg ctgccccac cctggaccag accagtcgcc cataacttat
 2941 tgtgtatatg tgtattgta gaacaaagac acaagtaaga aagtacaaat ggcccgcta
 3001 gcctgggaag ctatgacccc cctggcagga aacctacaat ctccatagt taagttaaa
 3061 aagcccctgc cattaacca gccaggggaa aaccaaggtc ctggggactc tccacaggaa
 3121 atgacat

Human herpesvirus 8 ORF73 gene, complete cds.

ACCESSION AF360120

VERSION AF360120.1 GI:13936995

1 atggcgcccc cggaatgag cctgaggtcg ggacggagca cggcgcgccc cttaacgaga
 61 ggaagttgta ggaaacgaaa caggtctccg gaaagatgtc accttggcga tgacctacat
 121 ctacaaccgc gaaggaagca tgtcgccgac tccgtcgacg gccgggaatg tggacccac
 181 accttgcta taccaggaag tcccacagtg ttacatccg ggctgccagc atttgtgtct
 241 agtctactt taccggtggc tccattcct taccgcgtc ccgaacacc ttacctcca
 301 cgggcactct tccccccgt aaccacgtct tctcccaa tccctccatc ccatcctgtg
 361 tctcgggga ccaaggatac tcatctcca tctctgcat tgccaccac gcagctcca
 421 gagtctctc aaaggccacc gcttcaagt cctacaggaa ggccagactc tcaaacct
 481 atcggtccgc caccctcgca gcagactaca cctccacact caccacgac tctccaccc
 541 gagctccct ccaagtcgtc accagactct ttagctccgt ctaccctgag tagctgaga
 601 aaaagaaggc tatctcccc ccaaggtccc tctactaa accaatatg tcagtcgccc
 661 ccagctctc cccctagatg tgacttcgcc aaccgtagt tgtaccccc atgggccaca
 721 gagtccccga tctagtggtg atcatccagc gatggcgata ctccgccag ccaaccgct
 781 acatctccca tctcatagg atcatcatcc ccgtctgagg gatcctgggg tgatgacaca
 841 gccatgttg tgctcctgc ggagattgca gaagaagcat ccaagaatga aaaagaatgt
 901 tccgaaaata atcaggctgg cgaggataat ggggacaacg agattagcaa ggaaagtcag
 961 gttgacaagg atgacaatga caataaggat gatgaggagg agcaggagac agatgaggag
 1021 gacgaggagg atgacagga ggtgacgag gaggatgacg aggaggatga cgaggaggat

Fig. 3 (cont.)

1081 gacgaggagg atgacgagga g gatgacgag gaggatgacg aggaggagga cgaggaggag
 1141 gacgaggagg aggaggacga ggaggaggag gaggaggacg aggaggatga cgatgatgag
 1201 gacaatgagg acgaggagga ggacaagaag gaggacgagg aggacggggg cgatggaaac
 1261 aaaacgttga gcatccaaag ttcacaacag cagcaggagc cacagcagca ggagccacaa
 1321 cagcaggagc cacagcagca ggagccacag cagcaggagc ccctgcagga gccacagcag
 1381 caggagccac aacagcagga gccacaacag caggagccac aacagcagga gccacaacag
 1441 caggagccac aacagcagga gccacagcag caggatgagc agcagcagga tgagcagcag
 1501 caggatgagc agcagcagga tgagcagcag caggatgagc aggagcagca g gatgagcag
 1561 cagcaggatg agcagcagca g gatgagcag cagcagcagg atgaacagga gcagcaggag
 1621 gagcaggagc agcaggagga gcaggagcag caggaggagc aggagcagga gttagaggag
 1681 caggagcagg agttagagga gcaggagcag gagttagagg agcaggagca ggagttagag
 1741 gagcaggagc aggagttaga ggagcaggag caggagttag aggagcagga gcaggagtta
 1801 gaggagcagg agcaggagt agaggagcag gagcaggagt tagaggagca ggagcaggag
 1861 ttagaggagc aggagcagga gttagaggag caggagcagg agttagagga gcaggagcag
 1921 gagttagagg agcaggagca ggagttagag gagcaggagc aggagttaga ggagcaggag
 1981 caggagttag aggagcagga gcaggagtta gaggagcagg agcaggagt agaggagcag
 2041 gagcaggagt tagaggagca ggagcaggag ttagaggagc aggagcagga gcaggagtta
 2101 gaggagggtg aagagcaaga gcaggagcag gaagagcagg aattagagga ggtggaggag
 2161 caagagcagg agcaggagga gcaggaggag caggagttag aggaggtgga agagcaggaa
 2221 gagcaggagt tagaggaggt ggaagagcag gaagagcagg agttagagga ggtggaagag
 2281 caggagcagc aggggggtgga acagcaggag caggagacgg tggaagagcc cataatctg
 2341 cacgggtcgt catccgagga cgaaatggaa gtggattacc ctgtgttag cacacatgaa
 2401 caaatgccca gtagcccacc aggagataat acaccagacg atgaccaca acctggccca
 2461 tctcgcgaat accgctatgt actcagaaca tcaccacccc acagacctgg agttcgtatg
 2521 aggcgcgttc cagttacca cccaaaaaag ccacatcaa gataccaaca accaccggtc
 2581 ccttacagac agatagatga ttgtcctgcg aaagctaggc cacaacacat cttttataga
 2641 cgcttttgg gaaaggatgg aagacgagat ccaaagttc aatggaagtt tcagtgatt
 2701 tttggggca atgaccata cgacttaaa aaattatctc aggccttcca gtttgagga
 2761 gtaaaggcag gcccgtgtc ctgctgccc caccctggac cagaccagtc gcccataact
 2821 tattgtgat atgtgtattg tcagaacaaa gacacaagta agaaagtaca aatggccgc
 2881 ctagcctggg aagctagtc cccctggca ggaaacctac aatcttccat agttaagtt
 2941 aaaaagcccc tgccattaac ccagccaggg gaaaaccaag gtctgggga ctctccacag
 3001 gaaatgacat aa

Kaposi's sarcoma-associated herpesvirus v-cyclin gene, complete cds.

ACCESSION U79416

VERSION U79416.1 GI:1711134

1 atggcaactg ccaataaccc gccctcggga cttctggatc ccacgctatg tgaggatcgg

61 atcttttaca atattcttga aattgagccg cgctttttaa cttctgactc tgtatttggg

121 tcctttcaac aatctcttac ttgcataatg cgtaagttac tgggcacatg gatgttttca

Fig. 3 (cont.)

49 / 186

181 gttgccagg aatacaacct agaacctaac gtggtcgcgt tggcccttaa tctttggac
241 agactcctac ttataaagca ggtgtccaaa gaacactttc aaaagacagg gagcgctgc
301 ctgttagtgg ccagtaagct cagaagcctc acgcctattt ctaccagttc actttgctat
361 gccgcggcag actccttttc ccgccaagaa cttatagacc aggagaaaga actcctgag
421 aagttggcgt ggccaacaga ggcagtctta gcgacggacg taacttcctt ctgttactt
481 aaattgctgg ggggctccca acacctggac tttggcacc acgaggtcga caccctgatt
541 acaaaagcct tagttgaccc aaagactggc tcattgcccg cctctattat cagcgctgca
601 ggctgtgcgc tgttggttcc tgccaacgtc attccgcagg ataccacac ggggtgggta
661 gttcctcagc tggcaagcat attgggatgc gatgtttccg ttctacaggc ggcagtggaa
721 cagatcctaa catctgttcc ggactttgat ctgcgcattc tggacagcta ttaa

Fig. 3 (cont.)

Epstein-Barr virus nuclear antigen (EBNA1) mRNA, 5' end.

ACCESSION M13941

VERSION M13941.1 GI:330399

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1 ttagagagtg gctgctacgc attagagacc acttgagcc acccacagta accaccagc
  61 gccaatctgt ctacatagaa gaagaagagg atgaagacta agtcacaggc ttagccagta
 121 acccagcact ggcggtgac gtggtgtaaa gtttgccgtg aacctgtggt tgggcaggta
 181 acttaggaag cgttcttga gcttccctgg gatgagcgtt tgggagagct gattctgcag
 241 cccagagagt agtctcaggg catcctctgg agcctgacct gtgatcgtcg catcatagac
 301 cgccagtaga cctgggagca gattcaccgc cgcgccgctc tccttaagt gtgaatcatg
 361 tctgacgagg ggccaggtag aggacctgga aatggcctag gagagaagg agacacatct
 421 ggaccagaag gctccggcgg cagtggacct caaagaagag ggggtgataa ccatggacga
 481 ggacggggaa gaggacgagg acgaggaggc ggaagaccag gagccccggg cggctcagga
 541 tcagggccaa gacatag

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Epstein-Barr Virus LMP1 gene.

ACCESSION X66863 S48740

VERSION X66863.1 GI:59181

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1 aatccgccac ctattctga aattccata tccccgtct gctgcttct caccgcgga
  61 cccttagccc tctatccgc tcaccgcct cccctacgtt taccacacag ccttgccca
 121 cctgaacccc cctaaagcac agcctccgc ctgccgaca cgacctcca acgttgccg
 181 ccctacgcct ctttgtgtg attacactgc cgctccac aacactgct actccccct
 241 gtgattgcc cactgcctt ccatctccct gtacgttta ccaccgatt cccacagct
 301 gcccctcgg gactgcctt tctaacaca acacacgct tctactcct ctftaacgc
 361 ttacatgcac acacactac cgcttcggg aaagcgggc ccgtaccctg tccggcagac
 421 cccgcaaat ccccgggcc tccatccca gaaacacgc ttactctc gtaggcggc
 481 tacataagc tctgtcact ctgtgcagc ttcttctc agttgcctg ctctgccac
 541 actaccctg ccatggaac cgacctgag aggggccac cggggccgc acggccccct
 601 ciaggacccc ccctctctc ttcataggg ctgtctcc ttctctgct ctggcgcta
 661 ctgtctggc tgtatcgt tatgagtaac tggactggag gagcgctct tgcctctat
 721 tccttgctc tcatgctt tattatcatt ctcatcatc ttatcaacag aagagacct
 781 ctctgtcac ttggaggcct tggctctac ctactgatg gtaagtatta cacccttgc
 841 ccccaacccc cttccctta cgcttcttc tctaacgcac ttctctct tccccagtc
 901 accctctac tcatgcctc ctggaattg cacggacagg cattgtacct tggaattgtg
 961 ctgtcatct ttgctgct acttgtaag atctaacatt ccctaggact tatttaccac
1021 accctcacct ttccagccct aacactctt ttcaacgca gtcttaggtc tctggatcta
1081 ctggagatt ctctggcggc ttggtgccac catctggcag ctttggcct tcatctagc
1141 cttctccta gccatcatc tgcctattat tgcctctat ctacaacaaa actggtggac
1201 tctattggt gatctctt ggctctct gtttatggc atttaatct ggatgtatta
1261 tcatggacca cgacacactg atgaacacca ccagatgac tccctccgc accctcaaca

```

Fig. 3 (cont.)

1321 agctaccgtc gattctagcc atgaatctga ctctaactcc aacgaggcca gacaccacct
 1381 gctcgtgagt ggggccggcg acggaccccc actctgctct caaaacctag gcgcacctgg
 1441 aggtggctct gacaatggcc cacaggaccc tgacaacact gatgacaatg gccacagga
 1501 ccctgacaac actgatgaca atggcccaca ggacctgac aacactgatg acaatggccc
 1561 acaggaccct gacaacactg atgacaatgg cccacaggac cctgacaaca ctgatgaca
 1621 tggcccatat gacctgctgc ctcataaccc tagcgactct gctggaaatg atggaggccc
 1681 tccaaaattg acggaagagg ttgaaaaca aggagggtgac cggggcccg cctcgatgac
 1741 agacggtggc ggcggtcatc cacaccttc tacactgctt ttgggtactt ctggttcgg
 1801 tggagatgat gacgaccccc acggcccagt tcagctaagc tactatgact aaccttctt
 1861 tacttctagg cattaccatg tcataggctt gctgactga ctctccctcc atttactgg
 1921 aatgccttag ctaatcacct taactggcac aactccctt agccacactg tctgtctag
 1981 ctgaaaagcc acattcatat tctatttcaa aacaagggga aggaggacat a

Epstein-Barr virus latent membrane protein 2A (LMP 2A) mRNA, complete cds.

ACCESSION M87778

VERSION M87778.1 GI:330384

1 ccaatgggcg cgggtccccc tagccccggc ggggatccgg atggggacga tggcggaac
 61 aactcccaat atccatctgc ttctggctct tctgggaaca cccccacccc accgaacgat
 121 gaggaacgtg aatctaata agagccccca ccgccttatg aggacctaga ttggggcaat
 181 ggcgaccgtc actcggacta tcaaccacta ggaaccaag atccaagttt gtacttggga
 241 ttgcaacacg acgggaatga cgggtccctt cccctccctt actctccacg ggatgactca
 301 tctcaacaca tatacgaaga agcgggcaga ggaagtatga atccagtatg c

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Epstein-Barr virus latent membrane protein 2A (LMP 2A) mRNA, complete cds.

ACCESSION M87777

VERSION M87777.1 GI:330382

1 actatggggt ccctagaagt gatgccaatg ggcgcggtc cccctagccc cggcggggat
 61 ccggatgggg acgatggcgg aaacaactcc caatatccat ctgctctgg ctctctggg
 121 aacaccccc cccaccgaa cgataggaa cgtgaatcta atgaagagcc cccaccgcct
 181 tatgaggact cagattgggg caatggcgac cgtcactcgg actatcaacc actaggaaac
 241 caagatccaa gttgtactt gggattgcaa cagacggga atgacgggct cctccccct
 301 cctactctc caggggatga ctcatctcaa cacatatacg aagaagcggg cagaggaagt
 361 atgaatccag tatgcctgct tgaattgtt gcgccctacc tgtttggct ggcggctatt
 421 gccgcctcgt gttcacggc ctgagtagt accgttgtga ccgccaccgg ctggccctc
 481 tcactttac tcttggcagc agtggccagc tcatatgccg ctgcacaaag gaaactgctg
 541 acaccggtga cag

Fig. 3 (cont.)

Epstein-Barr virus (EBV) genome, strain B95-8.

ACCESSION V01555 J02070 K01729 K01730 V01554 X00498 X00499 X00784

VERSION V01555.1 GI:59074

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1 agaattcgtc ttgctclatt cacccttact ttcttcttg cccgttctct ttcttagtat
61 gaatccagta tgccgtcctg taattgttgc gccctacctc tttaggctgg cggctattgc
121 cgccctgtgt ttcacggcct cagtttagtac cgttgtgacc gccaccggct tggccctctc
181 acttctactc ttggcagcag tggccagctc atatgccgct gcacaaagga aactgctgac
241 accggtgaca gtgcttactg cggttgtcac ttgtgagtac acacgcacca ttacaatgc
301 atgatgttcg tgagattgat ctgtctctaa cagttcactt cctctgcttt tctcctcagt
361 ctttgaatt tgccaaacat ggaggattga ggacccacct ttaattctc ttctgttgc
421 attgtggcc gcagctggcg gactacaagg cattacgggt tagtgtgcct ctgttatgaa
481 atgcaggttt gactcatat gtatgccttg gcatgacgtc aactttactt ttatttcagt
541 tctggtgatg cttgtgctcc tgatactagc gtacagaagg agatggcgcc gtttgactgt
601 ttgtggcggc atcatgtttt tggcatgtgt acttgtcctc atcgtcgacg ctgttttgca
661 gctgagtccc ctcttggag ctgtaactgt ggtttccatg acgtctgctc tactggcttt
721 cgtcctctgg ctctctcgc cagggggcct aggtactctt ggtgcagccc tttaacatt
781 ggcagcagggt aagccacacg tggacattg ctgtcccttt tgccacatgt ttctggaca
841 caggactaac catgccatct ctgattatag ctctggcact gctagcgica ctgatttgg
901 gcacacttaa cttgactaca atgttccttc tcatgctcct atggacactt ggtaagtfff
961 ccttctcttt aactcattac ttgtctttt gtaatcgacg ctctaacttg gcactctttt
1021 tacagtgggt ctctgattt gctctctgtg ctcttcattg ccactgagca agatccttct
1081 ggcacgactg ttctatatg ctctgcact ctgttgcta gcctccgcgc taatcgctgg
1141 tggcagtatt ttgcaacaa acttcaagag tttaagcagc actgaattta taccagtgta
1201 gtatctattt gttactcctg tttagttgaa gaaaacaagc tatlggattg taacacacat
1261 ttacgcttt gtccctaga ttgttctgc atgttattac tgattgtcgc tggcatactc
1321 ttcatcttg ctatctgac cgaatggggc agtggaaata gaacatacgg tccagttttt
1381 atgtgcctcg gtggcctgct caccatggta gccggcgctg tgtggctgac ggtgatgtct
1441 aacacgcttt tgtctgctg gattcttaca gcaggattcc tgatttcct catlggtaag
1501 tgtgacacca acaggtgttg ccttgittat tcaccgttct gacacatgac ttacatgggt
1561 ttggctttg taggctttgc cctcttggg gtcattagat gctgccgcta ctgctgctac
1621 tactgcctta cactggaaag tgaggagcgc ccaccgaccc catatcgcaa cactgtataa
1681 aggtaaagtat tattaattt tagagacact atcacgtgta acttgacgtg caaggatgga
1741 agagaggggc agggaaacgc aaatgccggt tgcccgggtat gggggcccggt ttattatggt
1801 aaggctcttc gggcaagatg gagaggcaaa catacaggag gaaaggctat atgagctact
1861 ctctgaccca cgctccgcgc tcggcctaga cccggggccc ctgattgctg agaacctgct

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Fig. 3 (cont.)

1921 gctagtggcg ctgcgtggca ccaacaacga tcccaggcct cagcgtcagg agagggccag
 1981 agaactggcc ctggtggca ttctactagg aaacggcgag cagggtgaac acttgggcac
 2041 ggagagtgcc ctggaggcct caggcaacaa ctatgtgtat gcctacggac cagactggat
 2101 ggcaaggcct tccacatggt ccgcggaaat ccagcaattc ctgcgactcc tgggcgccac
 2161 gtacgtgctt cgcgtaggaga tgggcaggca gtttggttc gaggtgcata gaagccggcc
 2221 ctcttccgt cagttccagg ccatcaatca cctgtcctg ttgacaacg cccttcgcaa
 2281 gtacgattcc ggccagggtg cggcgggctt ccagagggcc ctctggttg ccgggccaga
 2341 gaccgtgac acgaggccgg acctccgcaa gctgaatgag tgggtgttg gtggcagggc
 2401 tgcgtgtggc agacagctgg ccgacgagct aaagatcgtg tccgcgtgc gagacactta
 2461 ctggggccac ttggtcctc agcccacgga gaccttgac acatggaagg tgtgagcag
 2521 ggacacacga accgctcata gtttgagca cggattcatt catgccgcg ggaccatcca
 2581 ggccaactgc ccacagctgt ttatgagacg ccagcacccc ggctcttcc ccttcgttaa
 2641 tgcaatagca tcactgctgg gctggtacta ccagaccgcc accggccccg gagcagatgc
 2701 cagggcggcg gcccggcgcc aacaggcctt tcagaccagg gcggcggtg aatgccatgc
 2761 caaaagcggg gtgccggtcg tggccggctt ctacaggacc atcaacgcca cgctcaaggg
 2821 aggagagggc ctacagccca ctatgtttaa cggggagctg ggggccatca agcaccaggc
 2881 actgacact gtgaggtatg actacggcca ctatctata atgttggggc catccagcc
 2941 atggagcgga ctgacggccc ctccgtgccc ctacgccgaa agttcatggg cacaggcggc
 3001 cgtgcagacg gccctcgagc tgttctggc cctgtaccg gcccgtgca tctcgggcta
 3061 cgcgcgcccc ccgggccccca gtgctgtgat cgagcatctg ggtccctag ttccaaaggg
 3121 gggctctgtg ttgttctgt ctacctacc ggatgatgtt aaggacgggc tcggagaaat
 3181 ggggcccggc agggccacgg gacctggaat gcagcagttt gtcagcagct acttctcaa
 3241 cccgcctgt tccaacgtct tcattacagt gaggcagcga ggggagaaga tcaacggccc
 3301 taccgtctc caagcgctcg gacgcgcatg cgatatggca ggctgccagc actatgtgt
 3361 gggctccacg gtccccctg gtggactcaa cttgtcaac gacctggcgt ccccggttc
 3421 caccgccgag atgatggatg atttctctcc ctcttcacc gtggagttc ccccgattca
 3481 agaggagggc gcaagtctc cggtagcctt agatgtggac gagagcatgg acatctctcc
 3541 gtcttacgag ttgccctggc tctcgctgga gtcatgcctc acaagcatcc tgtcacccc
 3601 caccgtggga agcaaggagc acttggtag gcacacggac agggtcagcg gaggacgcgt
 3661 ggcacagcag cccggggtag gtcccctgga cctgccgtg gcggactacg ccttcgttc
 3721 ccacagtcat gtctggacca ggcccgggtg ggtctctccc ttgccctatc gtacctggga
 3781 tcgaatgaca gagaagctgc ttgtctccg aaaaccggc ggagagaacg ttaaggtttc
 3841 aggtaccgtg attacattgg gagaacaggg gtacaaagt tcgttgatc tgagggaggg
 3901 aaccaggctg gcaatggctg aggcgtgtgt gaacgcagca tgtgcccac tcttgatcc
 3961 ggaagacgtc ttgtcaccc tgcattaca cctggatccg cgccgggcag acaactcggc
 4021 cgtgatggag gctatgacgg cggcgagtga ctacgcgct ggccgtggcg tgaagctgac
 4081 ctttggtcgt gccctctgcc ccgagaccgg ctgcctgcc tccaacttca tgaccgtgt
 4141 ggcctctgtc tccgccccag ggggaatttc ggtctctgt atcacgccag tgcctcagaa
 4201 gacgggcagt ctctgattg cgggtcgttg cggggatggc aagatccagg gagggtcgt

Fig. 3 (cont.)

4261 gtttgagcag ctcttttagcg acgtggccac gacccacgg gcacccgagg cgtgtctct
 4321 gaagaatctc ttccggggcag tccagcagct ggtcaagagc ggcatcgtgc tgtcagggca
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 4561 ctcatgaac atgtacccgg cagtcctcgg tcgagtgggc gagcaaggtc cagatcaaat
 4621 gtttgagggt cagcacggcc cagagacggt gttgcgccag tcgctgcgcc tgctgctggg
 4681 aacctggtca tcctttgcca gcgagcagta cgagtgcctg cgaccagatc ggattaaccg
 4741 gtccatgcac gtgtccgact acggctataa cgaagcactg gcagtctccc cgttgacagg
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 4861 gctatgcgcc ccgggcacca ggggccatga aagcctcctg gcggccttca cgaatgccgg
 4921 atgcctgtgc cgacgggtgt tcttcgcga ggtagggac aacacgttc tcgacaagta
 4981 cgtgggtctg gccatcggag gagttcatgg ggccaggac tctgccctgg caggccgtgc
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 5701 ctccagact atgcatacac tgaatttagc ctgatattgt cccctagcc ccggggccag
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 6421 ccaacacggg ttccagaga gggtaaaaga gggggccata aagccagggt tgaataaac
 6481 cgaccgcgcc accagatggc acacgtgggg gaaatgagg ttagcatagg caacccccgc
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Fig. 3 (cont.)

6601 ttagacttg tagacactgc aaaacctcag gacctacgct gccctagagg tttagctagg
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 6721 gtgtctgtgg ttgtctccc agactctgct ttctgccgtc ttgggtcaag taccagctgg
 6781 tggccgcat gtttgatcc aaactttgt ttaggattt atgcatccat tatccgcag
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 7021 aggtcaagtc cggggggagg agaagagagg ctcccgct agagcattg caagtcagga
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 7201 aaccatcct ttccaatca attctgtac agggtttct ggacaccag tctagtta
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 7681 atatagatta ggatagcata tgctaccag atattgggt agtatatgt acccagatat
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 8581 cgtgtgagat ggacatccag tcttacggc ttgtccac ccatggatt tctattgta
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 8761 ggcgtacct gaaacctgt ttcgagcac ctacataca cctactgt cacaactcag
 8821 cagtattct attagctaaa cgaaggagaa tgaagaagca ggcaagatt caggagagt
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Fig. 3 (cont.)

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 9061 tatgctattg aattaggggt agtctggata gtatatacta ctaccggga agcatatgct
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 9301 tacacataaa ggcaatgttg tgtgcagtc cacagactgc aaagtctgct ccaggatgaa
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 9481 tgtaccaacc aactgaagggt attacatgca ctgcccgcg ggaaatacgt cctaccagg
 9541 aacccgaaac agtgtttccc agaagctgta aaaatagaac gccctggaac tgcccactg
 9601 tgcaatgcag ctttagcca tgccatgctc tataaatcac ttccctatct caggtaggcc
 9661 tgcacacctt aggtatggag cgaaggtag tggctactct gcagtgcctg gtgctgctt
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 9781 acctaagaga tgccctcagt cgtgttaaaa ccttttcca gacaaaggac gaggtagata
 9841 acctttgct caaggagtct ctgctagagg acttaagggt ctacctgga tgccaggccc
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Fig. 3 (cont.)

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 11401 atgcgcccat gtaggccac ttaacactac aagacctacg cctctccatt catcatgtaa
 11461 cccacaaatc atctaaaccg taagtctaag ggcctcctga ggtttctca ggaggcccta
 11521 atgtataatt aatcatgcat ttgattttaa aaaagtaggt tacactcatt ttaggccaga
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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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 170101 tggggggcg cgatttctg gaaaaagtg agggggcgt gccttcccc gcggccccc
 170161 agccccccg cacagagcgg cgtacggcg ggcggggcg ggggggtcg ggtccgcggg
 170221 ctccggggg tgcgggcgt gtagggcg gcacgtccg gggatcggg gggcggggg
 170281 gcgcccgcg ggcgcagcca tgcgtaccg tgatagggg gcagggtcg aggggtgtg
 170341 tctgtgggg gcgggagcg ggggcggcg gggagcctc acgccgttg agggtagaat

Fig. 3 (cont.)

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170521 tgaccggggg ctccggggtg acccagccaa gcgtgaccaa ggggcccgtg ggtgacacag
170581 gcaacctga caaaggcccc ccaggaaaga cccccggggg gcatcggggg gtggggcatg
170641 gggggccgcg cattcctgga aaaagtggag ggggcgtggc cttccccgc ggccccccag
170701 ccccccgca cagagcggcg ctacggcggg cgggcggcgg ggggtcgggg tccgcgggct
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170821 gccgcgcggg cgacgcatg cgtgaccgt atgagggggc agggtcgcag ggggtgtgtc
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171061 accgggggt cgggggtgac ccagccaagc gtgaccaagg ggcccggtgg tgacacaggc
171121 aacctgaca aaggcccccc aggaaagacc cccgtggggc atggggggcc gcgcattcct
171181 ggaaaaagtg gagggggcgt ggccttccc gcgcggcccc cagccccccc gcacagagcg
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171481 gaggcggtcg cggccccgc gcgccagcc aagccccaa gggggcggg gagcgggcaa
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172021 ggcggtcgc cccccggc gcacagcaa gcccccaagg gggcgggga gcgggcaatg
172081 gagcgtgac aaggggccca gggctgacc cggcaaact gaccggggc tccggggtga
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172201 caggaaagac ccccggggg catcggggg ggtgtggc ggggcatgg ggggtcggat
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Fig. 3 (cont.)

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Human herpesvirus 8, genome

Accession: NC_003409

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 781 aagtgcattt tctgtattt atgacactcg tagctctgat aggaaccatg tgtggtatct
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Fig. 3 (cont.)

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2161 tacaattaca aaacaattag aggatgagaa aactatatcc cagccaaata cacatattac
 2221 atctgcctta acatccatga aagcgaaagg taactttacc aacaagacca ataactctac
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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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 11641 gtgcacctc atattccacg tatacgacat cgtggagacc acctacacgg ccgaccgctg
 11701 cgaggacgtg ccatttagct tccagactga tatcattccc agcggcaccg tctcaagct
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 11941 gcgcgcgtac gacacacaac aatatgtgt gcaaaaaata accctgtcat ccagtccgat
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 13741 aaagatctc aagtgcctc tgctctgac taaaaagaga tacgtggggg tactcagtga
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Fig. 3 (cont.)

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13861 ggaaaagagc agtcagggtcc tggacctcat actgcgaggag ccgagcgtca aggccgcggc
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 13981 cgtcaagata attcaagtgc tcaacgcgag ccaccgggaa ctgtgcgaac gcagcgtacc
 14041 agtagacaaa ctgacgttta ccaccgagct aagccgccc ctggcggact acaagacgca
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 16081 gtaggatct tgcccactgt tgtgaaagc tctcgagcg tgctgattt tagactcgt
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Fig. 3 (cont.)

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 16321 actggcattc cagtgcacatc ctggaactta aaccaatgct accttctggt aagaaagcca
 16381 aaaagccggc tggcaaagcc gttgcacgc ctgtccgagg agacgactga ggagtgtcgc
 16441 gtcaggctca tccgccttg gaagacacac ctgcggatat cggtgactgc gctgcgcag
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 16561 gcctttgatc gtaaccgta caatcacgag acatttgct gtaatgcaa gcactacatc
 16621 ccagtcattc acagcggacc aaaaattacg ctggccccgc gcggccgcca ggtagtctgg
 16681 cacaacaaca gtcacacgct ctccctgcca tgcaaagtca cagccatcgt gtcaaaccac
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 16981 agaaaaatgt atgttgccac cggacgcagt taggtgtccg gttccaccc acacattgt
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 18361 gacagccgc gggaaatgaa agccatgtc gccgccccat aacaacctg tttgtttc
 18421 caggggcaca gtcggtatc agctgtcgaa aacgcctcat gtctccgc aatgcaggcc
 18481 acgggagaca tctgtttt ccgatccga gttgttatc aaccgcaact acacagtaa

Fig. 3 (cont.)

18541 gtgtaggatc catgccgga gggatataggt aaacaccacc aaccacacag tgtgctcta
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 18661 tggaaccata gccaccccca ggcaaaccct gtggaaggat atcaactaga gaggagggtc
 18721 cagccttatt atggcaggag aactataag ccccatcgcc cgactgggca ccaacataac
 18781 cgccacagta agtggcccta taccgtcag cgcccaagtt gttacagtca cacccaaccg
 18841 cgggtggctc tacattgtca tcacgtccat cattatgtgt tggttctccc gcttcctgt
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 19261 gatctatctc tgggtcatga ccgcccacta tatatagcca aaccacgct gcagcgga
 19321 ggccagcggc cccaatgtc ataataaaaa taaaaaat cagttccaga ccctcctgt
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 19441 atacgagcc acatatctga caggccgtgt ttctagagat agtgagccag gtgctaaac
 19501 aacttctatg gacgttctg agctctcctg tgcattcaca ggctctaat ctctcattc
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Fig. 3 (cont.)

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20881 gtgcggtcga gtcgatcgct gccacggcac aaaattccc tcaactgcct gagatactga
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Fig. 3 (cont.)

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 25501 gaaaactaga ggacacgat ggaaacata tcgcacgagg gttgttgaa agtcaacagc

Fig. 3 (cont.)

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25561 tactgtttt taatgaggac agatttgggc acaggccaga gggtaaagcc ctacgtgtgc
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 25681 cgtcacatat ctctgtgcac ccaagtgggt gttcaaccgt tgtttttgg atgattttc
 25741 cgcaccggct ttttgtggg cgcgcatagg tcggtacgcg ctgtccccct aagtcccgca
 25801 cggctgttcg gggcccgctc cggctcgtct cggatgaac cgtcacgttc ttgtctcca
 25861 gaggcgacgt ctcttcaga tgactcgtcc gtgggtcct cgtccgtccc gcccgcggt
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 27601 caccaaaaac ggggtgcaga caaaagtgt tttggggcg ctacttaga aggtgtgagg
 27661 gtttctaaga aaccccgcca acgcccggaa accgcatgcg ttccagtcgg tgcggcctgc
 27721 gccggcgtcg ctgtgggcc tttgtgggt ttgagttctg tcattaagcc aggtttccat
 27781 tgccaccgg gcgaaaacaa gccgggtagt ttacggggtc atcggcgat cagtgtacca
 27841 tattcccacg acccatcaac accgtgtctt gaggcgtgtc tctgtatgt tcaccggaga

Fig. 3 (cont.)

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27901 ctgcatgtat cgtgcatatc tgtattgtgc gcttgcgagg agacaacata ccgacgacca
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 28021 atatatitit ttggcacggg tgtgagcaac gccatcgtga gttggftaat accctctaaa
 28081 cgcatagtct tttttatit gtcaaccaac cagtcaatca cctgtcatcg ccgctcagaa
 28141 gcacacgtct tcggccaatg ccgtgttggc gggtttgacc acggttactg ataggtagac
 28201 gagtccgaca atcacacacg tccgccagcg atttcagcg cagctaaaat ccggtggccg
 28261 ggttggtaga agcaaattat ccaatggctg tgttgggtt tgtttgggg ttatctacat
 28321 attatatcc ttatcccagc tggttgcgga agtattcgca gcttggctac tctgctcgat
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 28621 tatgggaaca ctggagataa aaggggccag ctgagtcag ttagcactg ggactgccc
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 29161 aggtaatct agaaagcga ttgagttaa atcgggccac ttgccctaa atgtgacaat
 29221 ctggatgtg atctatttg tgcgttgta agcatttaa aatgcgttt agattgtatc
 29281 aggctagtgc tgtaattgtg tgttattt tccagttaa gcaagtcgat ttgaatgaca
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 29641 atgttatact ttgacaatt taacgtgcct agagctcaaa ttaaactaat accataacgt
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 30121 tatgtccct ggtgaccgt cacaatggac gaggacgtt tgctggaga ggtgtggcc
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Fig. 3 (cont.)

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 30361 atgtgcagg ttagcggcga tggaaacatg aactgggggc gagccctggc tatactgacc
 30421 ttggcagtt ttgtggcca gaagtatcc aacgaacctc acctgcgaga cttgctttg
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 30541 ggctggcgag gcctgaaggc gtattgtaca caggtgctta ccagaagaag gggacggaga
 30601 atgacagcgc tattgggaag cattgcatta ttggccacta tattggcagc ggtcgcgatg
 30661 agcaggagat aacgcgtaat tcgaggtccc cggaagagta gaggggtgca tgtatacaa
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Fig. 3 (cont.)

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33121 cgggtctggg ttatctccg gctcgtccg aagcgcagct ggcctacctt ggtgcgttta
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Fig. 3 (cont.)

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Fig. 3 (cont.)

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39121 caccttctt tgataatac aacctacaca ttattattt gtggtgagg gacaacggga
39181 ccgtagtga gataaggggc atgtatagaa gacgcgcagc cagtgtttg ttctaattc
39241 tctctttt tgggtctcg ggggtatct actttctta cagactgtt tccatcctt
39301 attagacggt caataaagcg tagatttta aaaggttcc tgtcattct tttgtatg
39361 gcatatactt ggcaagaaat ccgagcacct cagaaagtgg attgccgtca catatcagtt
39421 cgaccacccc tgcacctagc catgcggcgc ttgacggtc ttggggcta cacatcataa
39481 agtactttc catggctct ataagcacct tgaacaatc tgggggttg cgaatgggt
39541 ccctaaacgg gaaatcctct atggtattca ggcagaagac cgcgtctcc acccgacgtt

Fig. 3 (cont.)

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39601 tgagctttc tagcagagcg ccgaagaact cccgctcgtg tgttttcgca ggggcaagtt
 39661 ctgcgccgta cagcgatgag aaacacgaca cgatgtttc cagcccatg ctgcgcagca
 39721 acacgtgctt caggaacagg tgtgttagcc ggttcagtt tagcttgggt agaaaagtta
 39781 tcgagttgt agcacgctcc atgatggtaa cgggttgaa gtcacagacc gggcttttc
 39841 cgagtcctcg ccgcctgagt ccaatcatgt agaacataga cgcggcctcg ttgtctgtgt
 39901 taagtacac gatatcccg tgcgaaacct gtgcgatgt gtgttcagt atagatctgg
 39961 tctgaccggc acgggggtgt atgggggtgac gcggtaaagg cgactctggg tcaaaccct
 40021 ttatgcggtt ggcggcctcg tcgatgacga cacgctgtt cgcggcgtgt atggggacgc
 40081 gacggcatcc cgctggcaga tctataatct taaagttgt ataagactgg tcgtcgtta
 40141 tggccagccg gcactccggt agtatctcg tgcctcgaa ttcgtggccg cgtacgactg
 40201 gcttgagtg caggtaaacc ccaagagatg cggctcttc gcctacgcac aagtggcttc
 40261 ttaacgcgta ggggtgcggt gagagcatga tccgtagcaa cgatagtcc ggggtcctag
 40321 ccgcgtagag tggcagggtta gacgagtcg gagtcccaa ctttcgaac aacagtggca
 40381 tcgggacttc aggattagag actcccacca tggccgccac cgccggagag gtcaagacgt
 40441 gaaacacgcg ctgcctgtc gacaggcgcg ccgcgccctc tactagacta gcctcacgt
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 40561 gcgggtgtct ctgctggac gcggccgttc ggtggcgcca gtgcaggcct agtttgcgaa
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 40741 agatttcgg gattaggtta cacttttat atcccagtac tgcgcactcg tgttgcctt
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 41101 acacgttag cccatcctg ctggagacca cagatggaaa gttgtggtc caaaatacgt
 41161 ttttcgcc cattctacc atgtactgt ttccagtc gtgcaggtcc aacgtggagt
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 41461 taggaacgtg gcagctatc ttagtgttaa tcaccatgt ggtgtgaat atggtgatct
 41521 tgaagtttc caaactgacg tgtttgttg gttccagcat gtcgacact gtagagctgc
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 41761 cgatgcagtc tgccactgcc atacacatga cgagctgta gatggccggt gtgcccggat
 41821 acactagata gtaggtacaa tctgggttac tgacgaccac cctgtatggc ttggtccg
 41881 ggtccttgcg ttgattttt acgtgcagac gggacagag ctggtttaga gccagctgaa

Fig. 3 (cont.)

41941 agcccaccag atcccgtccg ttaacctga cgtcctggtg cttactctgt ttogacaggt
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 42061 gctctccgtg ccacccccac gtggccatga agctgctgat gttaaacttt aaaaaatgta
 42121 gctgtgcgtc tggggatgcg ggtggcatta ttgaaaacga gagatgcttc aggctctcca
 42181 ggagtgc aaa ataatttga tagattgtgg gttgtagact atggggcaac accgccagaa
 42241 acgcatgaaa aactgttcg aactcccaga actccaggta cctgcacact atcctgaaca
 42301 tggctttgta acatatgggtg caggttagta gcgcgggaag atacagcgag cgtagctccc
 42361 tgaattcgca gggttatca caatcatcgg taagtccca tgaatccacc gcaggtaggt
 42421 agttgtcgtt gtctatctgt ccgcgcgtaa acactccacc accgtcaatt attaaacctt
 42481 cgccgtgta ccgtcgaccc acttttccca aaagagtccc ttcttgatgt ataaaagggt
 42541 ggaggcgtc cccaggagt agtctgcgta tcgctctgca ggcgaaaaag gtgggctcgg
 42601 gctgcatcat ctatcaaga ctttctaagg tcagctctgc ctgcagggtc gagttggtgg
 42661 ccagacagca gaatatttcc agctgtgatt cccaagtgc ttgataacac gtggtctgcg
 42721 gactcgtcgt cagggaggcg ctcggtggca gtagtagggg gccctcgagc gctgccatgg
 42781 aggcgacctt ggagcaacga ctttcccggt acctgccac ggaggccaac ctctaacgc
 42841 agattaagga gtcggctgcc gacggactct tcaagagctt tcagctattg ctgggaagg
 42901 acgccagaga aggcagtgct cgtttcgaag cgctactggg cgtatatacc aatgtggtgg
 42961 agtttgtaa gtttctggag accgccctcg ccgccgcttg cgtcaatacc gagtcaagg
 43021 acctgcggag aatgatagat ggaaaaatac agtttaaaat ttcaatgccc actattgccc
 43081 acggagacgg gaggaggccc aacaagcaga gacagtatat cgtcatgaag gcttgaata
 43141 agcaccacat cgggtcggag attgagcttg cgccgcgaga catcgagctt ctctcgccg
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 43681 cctacgccag ctacgtgtc aggggtgcca acctcgtcac cgccgttagc tacggaaggg
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 44101 tttgctcgg ttacaaaaac gccctcaaaa gcatatgcca cctcgaatg cacaaccca
 44161 cccagtcagc ccaggcacta aaccaagctt tcccgatcc cgacggggga catgggtacg
 44221 gtctcaggta tgagcagacg ccaaactga acctattcag aacgttcac cagtattaca

Fig. 3 (cont.)

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44281 tggggaaaaa cgtggcattt gttcccgatg tggcccaaaa agcgctcgta accacggagg
44341 atctactgca cccaacctct caccgtctcc tcagattgga ggtccacccc ttctttgatt
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44461 ttggaaatat accacaaccg ctgctccaa gggagttca ggaaagtaga ggggcgcagt
44521 tcgacgctgt gacgaatatg acacacgtca tagaccagct aactattgac gtcatacagg
44581 agacggcatt tgaccccgcg tatccctgt tctgctatgt aatgaagca atgattcacg
44641 gacaggaaga aaaattcgtg atgaacatgc cctcattgc cctggtcatt caaacctact
44701 gggcaactc gggaaaactg gcgtttgtga acagtatca catggttaga ttcatctgta
44761 cgcatatggg gaatggaagc atccctaagg aggcgcacgg ccactaccgg aaaatcttag
44821 gcgagctcat cgcccttgag caggcgcttc tcaagctgc gggacacgag acggtgggtc
44881 ggacccgat cacacatctg gttcggctc tctcgaccc gcatctgctg cctcccttg
44941 cctaccacga tgtctttacg gatcttatgc agaagtcac cagacaaccc ataataaga
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45781 gtcaggccac cccgggcgc attagcgcca tggtagcat gcacaaaaa ctatctgcc
45841 ccagttcat ttgccaggca aaacaccgca tgcacctgg tttgccatg acagtcgtca
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46501 gtggctccct cggcgacgtg ctatacaata tcaccttcg ccagactgcg ctgcccggca
46561 gtacagtc ttgtcggcag ttctccaca aggaagacat tatcggtac aataggggt

Fig. 3 (cont.)

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46621 tgtacacttt ggtaaatgag tattctgccg ggcttgctgg ggcccccgcc accagcacta
 46681 cagacctcca gtacgtcgtg gtcaacggta cagacgtgtt ttggaccag ccttgccata
 46741 tgctgcagga ggcctatccc acgctcgccg ccagccacag agttatgctt gacgagtaca
 46801 tgtcaaaca gacagacac gccccagtac acatgggcca gtatctcatt gaagagggtg
 46861 cgccgatgaa gagactatta aagctcgga acaagggtgt gtattagcta acccttctag
 46921 cgttggctag tcatggcact cgacaagagt atagtggta acttcacctc cagactcttc
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 47041 caccgtttac aaaatataca ggcattgggc ctgggggtgcg tatgctcag tgagacatct
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 48841 attttttac gctaagagt gggtgctgg ggggtttgc attgctctgt tgtaactat
 48901 atataagta aacaaaatt cgcagggaga caaggtagc gtgtgagaa ctacttgag

Fig. 3 (cont.)

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48961 agtcagagaa tacagtgcta atcagggtag atgagcatga cttccccgtc tccagtcacc
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 49081 cttataacag tgctcttctt cctagtcata ggcgcctgcg tctactgctg cattcgctg
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Fig. 3 (cont.)

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51301 ttatcgtctc catctattcg acaaaaaacgg tgtacaacag tatgctattt aaatgcacaa
 51361 agaataaaaa gtacgactgc attgccaagc ggggtcggac aaaatggatg cgcatgctat
 51421 caacgaaaga tacgtaggtc ctgctgccca ccgtttggcc cacgtgggtc tgcctaggac
 51481 ctttctgctg catcacgccca tacccttggg gcccgagatc atctttcca cctacacccg
 51541 gttcagccgg tcgccagggt catcccgccg gttggtgggt tggggaaac gtgtcctgcc
 51601 aggggaggaa aaccaacttg cgtcttcacc ttctggcttg gcgcttagcc tgctctgtt
 51661 ttccacgat gggaacttic atccatttga catctcggtc ctgcgcatit cctgccctgg
 51721 ttctaactt agtcttactg tcagatttct ctatctatct ctggtgggtg ctatgggggc
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 51841 agcccaccct ttgagggaac tgcagaggct ggcgcgtgct acgccggacc cggcactcac
 51901 ccgtggaccg ttgcaggctc tgaccggcct tctccgcga gggtcagacg gagaccgcgc
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 52801 aggaatgcat atggactgtt aaccaatgt caggggacca tatcaaggtc ttaacgcct
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 53101 gactgagatt tcctacatt gctccggcg cgtcgcgga acacgtacct gacctgacca
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 53521 gaaacagaaa tttctgggt ctctgttcg atccattgt ccagagcagg gtaacagctc
 53581 tgaagataac tagccacca accccacgc acgtcgagaa tgtgctaaca ggagtgtcg

Fig. 3 (cont.)

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53641 acgacggcac ctggtgccg tccgtccaag gcaccctggg tcctcttacg aatgtctgac
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 53821 tggttccgtt ctcttcttg atgtttaa tttgggggg gaaccaccga caaagcgtct
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 53941 taatgttctc tacggatgcc agtagcatgc tgatgatgc caccactatc catgtcttc
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Fig. 3 (cont.)

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55981 ctggaagaga atggagagga gacccccact cactcctctt cggagatcaa ggacacaatc
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 56101 gatttcagag agaccctggg cgtccacatg gcagctgaat cagcatatac aggtgtccaa
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 58201 aatgggaggc gtgtctcgc aaaaagagga aattaacgcc cttcacaat cttattaggg
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Fig. 3 (cont.)

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58321 atactcgggg tcaaatcagt attaaagccc gcttcaaagc caacctcttc gtgaacgtcc
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 58441 tagatagcgg cattcctcgc ctccggtcac cgaaatacta catcgccacc ggcttcttca
 58501 gaaagcgggg ctatcaggat cctgtcaact gtaccatcgg tggcgatgct ttagaccgcg
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 58621 atcgtctgct tcaccaagct gccaaacttt ggtcaagaag tgcgaaggac acctttccat
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 58741 cggggaaccg ctgcacgtag tcgtggacta tgaccccat cgcgtttcag aaaagggcat
 58801 gttgctgag caatcgcaat ccccatatcc cgcattaaaa aagaagaaaa aaaataaaga
 58861 agcaatttat taagcaaaca gtatggttt ctgtacgtat ttattccgt ggtgggtgaa
 58921 aaataacggg ggatggagga agagggatgg gttataatg ccaatatatc agctaaatga
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Fig. 3 (cont.)

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 60901 agatgtgttt gtctgtctca cgtatgatat ccctatcgca gggcgggtcc ttctctgt
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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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 109921 gctagtagaa atggagtttg gtccgccgcc caagacgccg cggcgaggagg cgggtgggcc
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Fig. 3 (cont.)

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112141 ggtgaacgtc cccgcgtcgt aagccgacgc cgcggaaact cggtcagcgc gctcgcgcgg
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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

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Fig. 3 (cont.)

Human gene for granulocyte-macrophage colony stimulating factor
(GM-CSF).

ACCESSION X03021

VERSION X03021.1 GI:31858

Miyatake,S., Otsuka,T., Yokota,T., Lee,F. and Arai,K.

TITLE Structure of the chromosomal gene for granulocyte-macrophage colony
stimulating factor: comparison of the mouse and human genes

JOURNAL EMBO J. 4 (10), 2561-2568 (1985)

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Fig. 3 (cont.)

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Fig. 3 (cont.)